

# **HANDGUN TRAINING**

**FOR PERSONAL PROTECTION**



**Richard A. Mann**

**How To Choose & Use The Best Sights,  
Lights, Lasers & Ammunition**

**HANDGUN  
TRAINING  
FOR PERSONAL PROTECTION**

**Richard A. Mann**

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# Dedication

For Jeff

May we all one day ride, shoot straight,  
and speak the truth.



**Photo courtesy of Gunsite Academy**

*A portion of the profits from this book will be donated  
to the Jeff Cooper Legacy Foundation.*



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# Introduction

*The most lethal weapon on our planet is the human brain. It has given us the knife, the pistol, the atomic bomb, and the politician.*

It's thought that the first handgun was invented about 600 years ago. In the late 1800s, Samuel Colt used his brain to create what was arguably the first perfection of the defensive handgun, and in the early 1900s, John Browning further refined this tool. One hundred years later, Browning's 1911 remains one of the most popular handguns in the world, but it could be said that Gaston Glock brought the pistol into the new millennium and set the stage for what is the modern handgun.

Just as the handgun has evolved, so too has the way it is used. Methods of shooting a handgun in a defensive situation have evolved and continue to do so. Men like Ed McGivern, Rex Applegate, Bill Jordan, and others have drastically impacted the way we carry, train, and shoot handguns. Colonel Jeff Cooper has undoubtedly had the greatest influence on defensive pistol shooting. His legacy lives on through the Gunsite Academy and through hundreds of defensive handgun instructors worldwide. As Sheriff Jim Wilson has said, "There's no telling how many lives the teachings of Col. Cooper have saved."

But our brains never stop working to make things better. In the last 20 years, we have seen further advancement in every aspect of

the defensive handgun. Defensive handgun ammunition has drastically improved, handgun-mounted lasers and lights have become extremely compact and offer instinctive activation and, thanks to men like Wayne Novak and Ashley Emerson, handgun sights have improved, too.

Savvy instructors have also improved the way we train to fight with a handgun by building on the foundations laid by McGivern, Applegate, Jordan, and Cooper. But, what we have not seen, is a dedicated effort to include the accessories associated with the modern handgun—like the many lasers, lights, express sights, and ammunition available—into training doctrines. Is this a necessary consideration? Damn straight! With millions of shooters using these new tools, the exclusion of training on how to properly apply them is not just irresponsible, it's recklessly negligent.

Within these pages, you'll find information to help you understand the modern defensive handgun and the modern sights, lights, and lasers that commonly accessorize it. You will also find what may be the first truly practical look at selecting and categorizing defensive handgun ammunition. No, you'll not find another numerical formula that rates one load or cartridge three points better than another. You'll see realistically objective comparisons. Maybe even more importantly, you will be provided with guidance on the practical application of the modern handgun, as well as training drills and techniques that will teach you how to use it to save your life.

None of this is rocket science, and the complete understanding of this book will not make you a super ninja, a tactical warrior, or a Jedi firearms instructor. The methods and techniques contained

herein are nothing more than a common-sense approach to solving problems. The crux is that these problems do exist, and you can expect to face in the real world. By its most simplistic definition, this book is the melding of the modern technique of the pistol with the modern defensive handgun and its accessories.

It should be understood this is not a beginner's book. You will not find information here on the various kinds of handguns or how they work. Countless other books are available on that subject, and the owner's manual for your handgun will cover how to operate your specific firearm. Just the same, you will be not bombarded with opinions from me that deal with which handgun I think is best. I do have opinions and I'm sure they'll shine through, but, from a practical standpoint, as long as you have a serviceable handgun that is reliable, you can use it to learn the techniques contained herein. What *you* can do with your handgun is and will always be more important than who made it, what type it is, or whether I or some other so-called expert likes it.

Ideally, this book has been written for someone who has purchased a pistol for personal protection and concealed carry and who as attended and completed the necessary training requirements to obtain a concealed carry permit. It is appropriately configured for the person who is familiar with the basic operation of their handgun, but might have not received any formal instruction on how to practically apply it to save their life.

The truth is, when it comes to firearms training, at any level, there is no replacement for a savvy instructor, a well-equipped shooting range, and an eager student. Good, patient instructors are not in great abundance, and those who are do not work for free.

Marksmanship is a discipline and cannot be taught by someone you are not temporarily willing to submit control of yourself to.

Husbands and boyfriends, for instance, are notoriously bad firearms instructors, only because of the delicate and complex interpersonal relationships that can exist between a man and a woman. Mothers and fathers can be moderately successful at teaching their offspring to shoot, but there is most often a point where diminishing returns are met. Again, it is the dynamics of familiarity that make the instructional process difficult.

In a perfect world, firearms would be taught to all civilians in our public schools. As farfetched as this might seem, when I was in seventh grade, we were all required to take the hunter's safety course, we all shot trap on the school baseball field, and we all reloaded shotgun shells in the school gym. Sadly, that was another time and, obviously, this world is far from perfect.

This leaves the law-abiding civilian with a couple choices, when it comes to their education of personal protection with a defensive handgun. They can head off to a reputable school like Gunsite and learn a proven technique from master level instructors; they say the best lessons in life are free, but free lessons tend to be learned the hard way and not at your convenience. You'll pay for what you learn at Gunsite, and it will be well worth the coin.

The law-abiding citizen can also seek out some local practitioner and hope they have not thrown in with some tactard. This is generally much more affordable, but with this financial convenience comes the unknown component—will you learn anything of value? In the last decade, countless shooting schools have cropped up all over. In most cases they are operated by qualified and experienced



folks, but qualifications and experience do not always guarantee quality instruction.

Lastly, an eager student can read books, watch videos, seek out the advice of trusted sources, and hope to garner the necessary knowledge with a limited expenditure of funds. In truth, all these methods can work. However, having been party to attempts at them, all I can say with confidence is that the further you get from Gunsite, the less confidence you can have in the results.

The truth is we are all financially somewhere between one box of ammunition and a personal bodyguard when it comes to our own safety. Life, as it is, is a financial endeavor, and we all must balance our desire to become a modern day gunslinger with paying the light bill, the house payment, and eating bologna sandwiches.

This is why books like this are published. It gives those who don't know a place to start. And it gives those who do know options to consider. However, this book (or any like it) should never be considered a replacement for practical, hands-on application under the watchful eyes of a talented and experienced instructor.

Regardless, here we are. You are reading this book because you want to learn the art of the defensive pistol. You may have never fired a handgun before but feel you need to know how, or you may be an accomplished competitor but uncomfortable with the notion of using a gun to protect yourself. You may just be an average American citizen who even owns and shoots guns but, until now, has not felt the need to rely on one for protection. If you are any of those, you are my kind of people, and hopefully you will find something within these pages to start you down the right path or enlighten you on some aspects of the topic you have yet considered.

# The RULES

Throughout this book you will see references to these 10 RULES.

(For a detailed explanation of each rule see Appendix A.)

**RULE No. 1**—All guns are always loaded.

**RULE No. 2**—Never let the muzzle cover anything  
you are not willing to destroy.

**RULE No. 3**—Keep your finger off the trigger until  
your sights are on the target.

**RULE No. 4**—Always be sure of your target.

**RULE No. 5**—You gotta be willing.

**RULE No. 6**—Have gun, will travel.

**RULE No. 7**—Learn to run your gun and practice.

**RULE No. 8**—Be justified, don't be stupid. Think!

**RULE No. 9**—Everything looks better with light on it.

**RULE No. 10**—Never be more than five shots away  
from a reload, cover, or a long gun.

# Foreword

Richard Mann calls himself a hillbilly, and I guess that makes us kinsmen. Our ancestors are both Scot-Irish, who came to Appalachia from Scotland. His stayed in those beautiful eastern hills, and mine moved (or were encouraged to move), on to Arkansas and Texas. The Scot-Irish lean towards being huntsmen and men of the woods. You eat what you shoot, your word is your bond, and you take care of yourself and yours instead of relying on some government to do it. In *Born Fighting*, James Webb said it best, when he wrote, “If you insult a Yankee, he’ll sue you. If you insult a mountain boy, he’ll kill you.”

Mann spent a number of years in law enforcement. I don’t know how many gunfights he had to face; a man doesn’t ask that sort of question of another. But I do know that he has grit. I recently watched him walk into some tall African grass after a wounded Cape buffalo that was looking for someone to blame his troubles on. I watched as Richard faced the threat head on and took care of business.

Within the family clan, the grownups teach their skills to the children. So it was that Richard first learned about guns, shooting, and marksmanship from his father, uncles, and grandpa. And somewhere along the line he developed an inquisitive mind. Those of us who read his writings on a regular basis know that Mann is continually questioning the old accepted facts regarding bullets, velocities and, especially, terminal ballistics. And he is not afraid to

do the hard work and research that allows him to back his opinions up with solid facts.

What you are about to read is an interesting treatment of the Modern Technique of the Pistol, a defensive method that has proven its worth over time. But it is also a modern, up-to-date look at pistol sights, defensive lights, and laser sights, among other things. Mann offers some good, solid advice on how to become a skilled defensive shooter. You will note that his work is completely devoid of the kind of stuff you hear from the mall ninjas and Internet experts (“tactards,” he calls them). It is a pretty darned good blueprint for defensive living.

One of the things that I like about Richard Mann is the fact that, while you may not always agree with him, he forces you to think in order to disagree. And you’d better have all of your facts lined up before you start the debate, because you can bet that his facts and figures will be in good order.

In fact, about the only real weakness that I see in Richard Mann is his preference for dark spirits. At his advanced age, he should know that clear libations have a much greater therapeutic value, not to mention their increased nutritional qualities. In fact, clear booze gives one a much brighter outlook on life and appreciation of one’s fellow man. You may be assured that I am working with him to overcome this flaw in his moral fiber.

In truth, Richard Mann is a “man at arms.” He has the skills, manners, and class, all of which qualify him for the title. What you are about to read is worth reading. You will read it again and again, as your defensive ability and understanding grow. Take it to heart—it just might save your life.



—Sheriff Jim Wilson Big Bend country of West Texas

## Chapter 1

# The Secret

*Secrets learned are nothing more than information the dedicated have uncovered with time.*

**S**urprise! I'm going to give you the secret to shooting a handgun accurately in the first chapter of this book. Actually, I'm going to give it away in the very first *paragraph* of the very first chapter. The single most important skill you must master with a handgun is the ability to operate the trigger—make the handgun fire—without disturbing the sight picture.

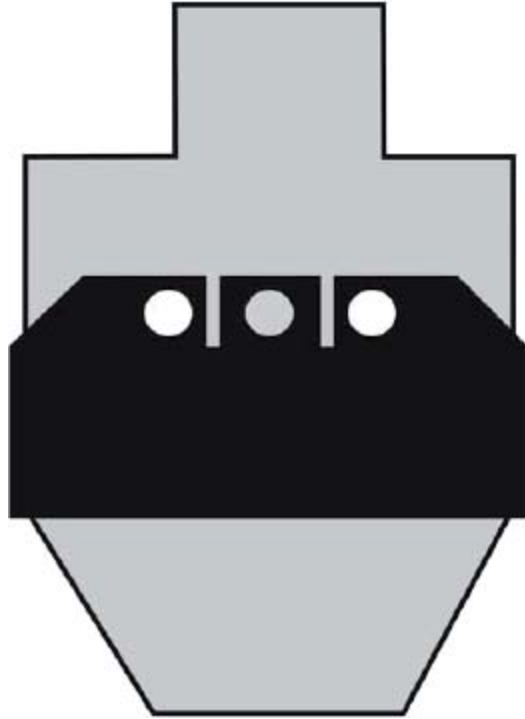
That's it. The secret is out.

As simple as it sounds, this single task is the most difficult part of becoming proficient with a defensive handgun. It is the foundation that must be laid before any other skills can be developed.

Anything you build on a sub-par foundation is doomed from the start. At some point, you will add something to this less than ideal foundation, and it will collapse. It might be stress, unique shooting positions, low light, or a host of other circumstances through which you must perform. No matter, if your foundation has not been constructed properly, trouble is coming your way on a dark horse.

PROPER SIGHT ALINGMENT





### **Understanding proper sight alignment is step No. 1.**

The secret, as it is, is not really a secret at all. The successful operation of any individual weapon system is dependent on this same premise. Any firearms instructor worth the TacTard-like range pants he's wearing knows this. He may not tell you this before you sign up to take his class for fear that, if you know the secret, he will not get your money. A good firearms instructor will tell you the secret before you get out your credit card. They will also tell you they will help you get started the in the right direction to hopefully construct that proper foundation.

The secret can be learned in many ways and, for some, the skill needs to be taught in different ways. Finding an instructor who understands that teaching marksmanship (or anything else for that matter) is not a one-size-fits-all concept is the key. Some—no, *most*

—can learn the secret on their own. I did, and I'm not the brightest bulb on the tree. How did I do it?

The simple answer is I did it because I really *wanted* to. I grew up in a hunting family. The favorite family pastime was stumbling along in the dark behind a pack of hounds hot on the trail of a raccoon. You uptown folk will not understand, but here in the Appalachians, 'coon hunting was and continues to be an enjoyable endeavor. It's kind of like fox hunting for simpler men or rednecks, and I say that with no disrespect.



**Learning to manipulate the trigger of your handgun properly is  
step No. 2.**

When my family went 'coon hunting, we *all* went. Grandpa and Grandma, Mom and Dad, uncles, nephews, and cousins. Generally,

there were more people than dogs (or 'coons) in the woods. The desired result was for the dogs to tree the 'coon. The hounds would then hang around under the tree barking until the hunters arrived and shot the 'coon out. When our family arrived at the tree, it was the kids who got to do the shooting, generally with a beat up .22 rifle with crude open sights.

The youngest kid shot first. One shot. Then the rifle was passed on to the next oldest until someone made the correct shot and the raccoon tumbled down to earth, where a pack of anxious hounds were ready to rip it to pieces. On most hunts I was the youngest, and it became apparent that, after my first time at bat, if I wanted to be the one to shoot the 'coon, I'd better get it done with my one shot. Otherwise, the gun would never get back to me before the ringtail was done for.

I started practicing and asked everyone I knew what the trick was to shooting straight. Unanimously, the answer was something like, "Put the sights on the target and gently pull the trigger." And that's what I did. And I did it every chance I got. It wasn't long until I learned that, if the sights moved much at all when I pulled the trigger, I would miss. I had discovered "the secret," and for several years no one got to shoot the 'coon out of the tree but me. (RULE No. 7)



**It has been joked that my first concealed carry pistol was a flintlock. I'll not confirm nor deny that, but I will admit my early firearms education did involve blackpowder.**

I know what you're thinking, that was a rifle, not a pistol, and they're clearly not the same. True, they are not the same, but if you want to hit what you aim at, you still must employ the secret. And when I got the chance to shoot a pistol, that's what I did.

My father was not very fond of handguns and we did not have one in our house. It's not that he was against guns, he just didn't like pistols. Ah, but Grandpa, he was a different story. Grandpa kept a Smith & Wesson Model 10 nearby and loaded most of the time. I

remember when we went to our hunting camp, he would hang it on a nail that had been driven into a second-floor joist above his bed. Grandpa would let me shoot that pistol on occasion, and that's where I really began to learn the value of the secret.



**Grandpa's Model 10 was the first pistol I ever fired. It is still in use today; my sister carries and shoots it often.**

Grandpa's Model 10 was a double-action revolver with a long and heavy trigger pull. It was hard for me, with my little fingers, to pull that trigger without disturbing the sight picture. But, if I cocked the revolver first, the trigger was much easier to manage, and it wasn't long until a soda can set at 10 yards was within my kill zone.

When I was 18, I moved out of my parents house, and the first thing I did was buy a handgun, a Smith & Wesson Model 66 that had much better sights than Grandpa's old Model 10. I got good enough with that pistol to shoot a few groundhogs and extend my danger zone out to about 30 yards. The next year I joined the Army National Guard and went away for 13 weeks to learn how to shoot a pistol, drive a tank, walk until my legs hurt, and eat what the Army assured me was food. On the pistol range and on the tank range, I learned the secret still applied.

I left basic training with an Expert rating on the pistol and thought I was truly hot shit. Truth was I was barely even a lukewarm turd, when it came to applying a defensive handgun in a way that might help me survive a gunfight. Sure, the Army had taught me how to hit a silhouette target with a 1911, but they didn't care *where* I hit it.

For the next several years, I fiddled with all sorts of handguns and, admittedly, got to the point where I might be considered a marksman at least as much as you would consider the guy flipping burgers at the local fry joint a chef. It wasn't until I became a cop that I learned the secret not only has to be learned, it has to be *mastered*.

The first day on the job, I was whisked off to the range by the Department's firearms training officer. When we arrived, I noticed the grass was ass deep and the target frames were in such disorder I felt like we had stepped into some sort of apocalyptic world. The Lieutenant never said much, he just walked downrange, beat some weeds down, and hung up a target. He asked, "You ever shot before?"



“Yes, sir.” I replied proudly.

The man kind of sneered and said, “You know how to load that thing? Use a speedloader?”

Again, “Yes, sir.”

“Well,” He mumbled, digging a stopwatch out of the glove box, “Let’s get started.”

And we did. I shot Expert on the Department’s qualification course. Don’t think I’m bragging; it wasn’t all that hard. The target was big, I was standing still, and I had plenty of time.

“You passed.” The lieutenant growled.

“Great.” I said, “What do we do now?”

“We’re done,” he said, as he crawled back into the patrol car, no doubt wondering where he could scarf a free lunch. “Pick up your brass.”

“What about some tactical training? Shooting on the move, multiple targets, stuff like that?” Hey, I’d been reading gun magazines.

Apparently, the lieutenant hadn’t, because that was the end of my firearms training until I went to the police academy four months later. What I learned there wasn’t much better and, to be quite honest with you, I was scared. I was scared I might have to actually shoot it out with a bad guy—or, even worse, that some of my brethren who could not meet the “Expert” rating I had achieved would have to shoot a bad guy to keep him from shooting me. Bottom line was, I knew then, just like I had learned 20 some years before, that if I wanted to shoot to live, I’d have to teach myself.

A few days later, while visiting the local gun shop, I found a mint condition Colt Lightweight Commander someone had traded in. I

bought it instantly. (Actually, I laid it away; I was only making about \$ 350 a week.) The next thing I did was the wisest decision I ever made with regard to learning how to shoot a handgun in a defensive manner: I sent the Colt to Novak's for some customization. There it was handed over to a fellow by the name of Joe Bonar. We became friends, and Joe, who was like a young, more modern, version of *Rooster* Cogburn, proceeded to teach me how to shoot a handgun.





**This was my first true carry gun, a Series 70 Colt Lightweight Commander customized by Joe Bonar of Novak's.**

But here's the thing. What I really learned from Joe was that I needed to improve my foundation, i.e., master the secret. Experts say that it takes—depending on the person and the difficulty of the task—somewhere between 300 and 5,000 correct repetitions to burn

a physical act into your muscle memory. That's a hell of a lot of shooting, and when you consider most defensive handgun schools are only a couple days long, it's easy to see why few graduates never really master the secret.

Gunsite's 250 Pistol Class is one of the most revered defensive handgun training courses in the world. Graduates can shoot, on average, better than 80 percent of the police officers on the street when they drive through the gate. I know this because after that grouchy Lieutenant who took me to the range for the first time accidentally shot himself in the leg, I was made the department's firearms instructor. In short, I've seen a lot of cops shoot.



**You shoot groups like this by mastering the secret. Luck is not part of it.**

During Gunsite's 250 pistol class, you'll shoot about 1,000 rounds. Granted, you'll do this under the observation of some of the most talented instructors in the world, but you're still well short of that 5,000 repetition goal. That's why Gunsite will tell you to practice when you get home. Learning to shoot a handgun is kind of like learning to ride a bike—you never really forget how, but your skills get rusty if you don't keep at it.

During that 250 class, you'll also be taught some other very important things, like how to operate your handgun, how to draw your handgun from a holster, how to reload and clear malfunctions, and generally how to act when you have a loaded handgun in your hand or on your side. But, more than anything, at Gunsite you will be taught "the secret." If you thought you already knew the secret, the instructors there will verify it as a point of fact or retrain you.

As a single parent making less than 20 grand per year, I could not afford to go to Gunsite, or any training school, for that matter. Today, I realize that many folks who want to learn to use a handgun for personal protection are in and will always be in that same boat. That is one of the reasons you are reading this book and the main reason I wrote it. Joe Bonar knew it, too, and that's why he worked with me to make sure the secret was as much a part of me as the Force was part of Luke Skywalker.

Actually, to someone wanting to learn defensive handgun craft, the secret is to them kind of like the Force is to a Jedi. Once it's inside you, you get it. You understand that no matter how and when you shoot or what you shoot at, it's the secret that will guide your bullets to the mark. Make no mistake, tactics can be a vital part of surviving a gunfight, but the key to hitting what you aim at is founded in the secret.

As important as the secret is to hitting what you aim at, it is not the key to surviving a gunfight. That is something else entirely and something that cannot be taught at Gunsite or by anyone else. You have it, find it, or live without it. You have to be willing to pull a trigger and possibly send another human off to never, never land for all of eternity. You have to be willing to take responsibility for your



own safety and be willing to deal with the consequences that the actions you take to do so might bring—you have to have the right *mindset*. (RULE No. 5)

## Chapter 2

# Mindset

*Like you're killing snakes.*

**M**indset matters. Maybe most.

In 1972, Col. Jeff Cooper wrote *Principles of Personal Defense*. Many consider it required reading for someone intent on taking responsibility for their personal safety. I agree, but think it should also be required reading in every high school across the country, a book that should be read by all at about the time they become an adult.

Those who did not grow up reading Cooper's words in *Guns & Ammo* and those who have not been to Gunsite to learn and understand his legacy might not grasp the importance of his work or understand just who in the hell this Jeff Cooper guy was. John Dean Cooper was born on May 10, 1920. His friends called him "Jeff" or "Colonel." Cooper was, in fact, a colonel in the Marine Corps, serving in WWII, Korea, and Southeast Asia. In the '50s, Cooper was heavily involved in practical shooting competitions. What Cooper learned there, combined with his personal experiences, helped him recognize and codify useful ideas and techniques. These lessons and experiments led Cooper to develop a methodology of practical pistol shooting known as the Modern Technique of the Pistol.



**Jeff Cooper in uniform.**

In addition to laying the foundation for which almost all practical pistol training would be and continues to be built upon, Cooper was an outspoken advocate of the four basic rules of gun safety. He was also the founder of the International Practical Shooting Confederation (IPSC), a member of the NRA Board of Directors, and an editor-at-large for *Guns & Ammo* magazine. Cooper taught The Modern Technique of the Pistol in Mexico, Guatemala, El Salvador, Honduras, Indonesia, Costa Rica, the Philippines, Germany, Belgium, Switzerland, Sweden, South Africa, Southwest Africa, and Rhodesia. But Cooper's teachings are best known at the school he founded in Paulden, Arizona, during America's Bicentennial year, a school established for the purpose of teaching law-abiding citizens the Modern Technique of the Pistol.

Originally, this school was called the American Pistol Institute (API). Later, when the program of instruction expanded to rifles and

shotguns, the name was changed to Gunsite. Cooper ran Gunsite until 1992, when ownership changed hands. Today, this school is known as the Gunsite Academy and is owned and operated by Buz Mills who, unlike the previous owner who came on after Cooper, was wise enough to embrace Cooper's vision of the school while maintaining the high standards of operation Cooper had demanded during his reign.

Cooper was the recipient of the 1995 Outstanding American Handgunner Award and was the author of a variety of books and many, many magazine articles. Colonel Cooper is considered the Dean of Pistol Shooting. He passed on September 25, 2006, in his home at Gunsite, with his family by his side.

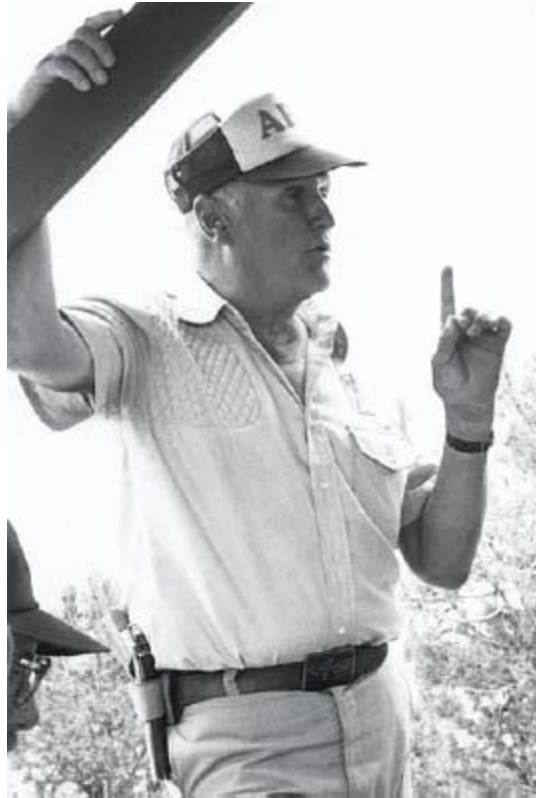


## **Jeff and Janelle Cooper at Gunsite.**

In *Principles of Personal Defense*, Cooper presents an understanding of what being responsible for your own safety is all about. The seven principles Cooper covers in the book are alertness, decisiveness, aggressiveness, speed, coolness, ruthlessness, and surprise. Cooper essentially explains how having the proper mindset is the foundation to winning. Mindset is one of the elements of what Cooper called the “Combat Triad,” which was also made up of Marksmanship and Gun handling.

Any attempt here at conveying the message Cooper presented in *Principles of Personal Defense* would do nothing but fall short of the mark. It is the definitive study on the proper mindset for surviving a lethal confrontation. *Principles of Personal Defense* is a short book with a big message. You can read it in an evening while you sun on the veranda, drinking an Arnold Palmer, sipping fine Irish whiskey or beer, whatever your pleasure demands and budget allows.

Let me go on record now as having given you the best advice I can to save your life: read, consume, and absorb *Principles of Personal Defense*. The book costs less than 20 rounds of good defensive handgun ammunition. For those of you who will not take my advice on this matter, whose wallet is as tight as a barrel bushing on a 1911, who are probably reading this book because someone gave it to you, and with apologies to Col. Cooper, I will outline his message:



**Cooper's teachings about marksmanship, mindset, and gun handling were ground breaking at the time and are still relevant today.**

- **Alertness:** Be aware, be ready. Bad things can happen at any time. Live by the Gunsite (Cooper) Color Code.
- **Decisiveness:** Counterattack now! Do not tarry. To ponder is to perish.
- **Aggressiveness:** Go at it like you mean it.
- **Speed:** Be sudden, be quick. Be first.
- **Coolness:** Keep your wits. Don't lose control of your emotions.
- **Ruthlessness:** Strike with all your strength for every blow. Shoot them to the ground.

- **Surprise: Do not wilt, do not cower, and don't be predictable. Fight back.**

This, in brief, is the mindset you must have. A close friend of mine believes in luck, and if such a thing exists, it would be a wonderful thing to believe in. But luck, if it does exist, seems to have a way of showing up at random, and while randomness might be acceptable in sports, love, and hunting, is not acceptable when your life is on the line. As it has been said, luck is when opportunity meets preparation. Prepare your mind—get the combat mindset—and when opportunity or bad timing puts your life on the line, preparedness will be there waiting.

I don't have Cooper's command of the English language, nor can I present a discussion with his eloquence. My simple, hillbilly upbringing leaves me with mostly analogies to describe the mindset Cooper espoused. I can see elements of these principles when I read about Lt. John Chard's coolness in the preparation and defense of Rorke's Drift. When I watch Peyton Manning get behind his center and the football finds his hands, I see many of these elements represented in high definition right on my television. When I think about the right mindset I think of men like Rudel: "Only he is lost who gives himself up for lost." Men like Yeager: "Rules are made for people who aren't willing to make up their own." Like Patton: "Do your damndest in an ostentatious manner all the time." And of men like Nathan Bedford Forest: "Never stand and take a charge. Charge them, too."



**Born in 1905, my grandfather made his way through prohibition carrying a gun and running moonshine. You cannot live a life like that without the right mindset.**

I also think of my grandfather, a farmer turned moonshiner turned entrepreneur and later a member of the local Board of Education. He never got passed third grade, but when I was growing up, he was the smartest man I knew. When Grandpa wanted you to get after a job with dedication he would say, “Get at it like you’re killing snakes.” I can think of no better way to describe the response that should answer a violent attack.

Its true there has been almost no talk of gunnery in this chapter, and that is by design. Marksmanship is, as a point of fact, a physical act. You do not have to be especially smart to be a good marksman. You don’t even have to be all that worldly or, necessarily, an adult.



To be a marksman, you must understand the secret and apply it accordingly.

However, to survive a gunfight, a lethal confrontation, an attack by a troll, or any other wickedness, you'll need more than marksmanship. You'll need the right mindset. There's no shortage of gravestones that rise above those who could shoot but who could not or did not act. The deadliest weapon on Earth is the human brain. Combine one that's hitting on all eight cylinders with a good defensive handgun and the skill to employ it, and good luck and Col. Cooper will be on your side.

### **The Cooper (Gunsite) Color Code**

In addition to his wisdom on the principles of personal defense, Cooper also devised a color code, a four-color categorization of personal awareness that provides a clear and simple mechanism for gauging the level of perceptiveness the situation requires. Color codes to represent levels of awareness or preparedness are nothing new or novel, but Cooper was, it seems, the first to marry this system with personal protection and a mental state. The four colors are white, yellow, orange and red.

In condition white, you are relaxed, on your sofa watching *Dancing with the Stars* or on the deck, sipping a cold beer and listening to a coyote sing longingly as the sun finds other lands to shine on.

GUNSITE - COOPER - COLOR CODE			
WHITE	YELLOW	ORANGE	RED
Relaxed	Relaxed Awareness	Specific Alert	Mental Trigger
Unaware	Aware of Enviroment	Anticipation	"If he, then I ..."
Unprepared	Easy to Maintain	Full Attention	Fight or Flight

Condition yellow is relaxed awareness. You are on the sidewalk, headed to your favorite eatery with a lady's arm in yours and a smile on your face. You are not nervous or worried, but you know there is another well-dressed couple behind you, light traffic on the street, and that just around the corner there are generally teenagers riding skateboards and, on occasion, a wino looking for a handout.

A specific alert, one that will startle you in condition white but only elevate your awareness if you are in condition yellow, drives you to condition orange. You have smelled, heard, seen, or felt something you do not like, something that is not right—a ruckus across the street, a shifty look from a stranger, a car stopping abruptly on the curb. Something has won your full attention and will hold it until the balloon goes up or the box is shut.

In condition red, you have identified a specific threat and it is time to react. It is time to exercise every element of the principles of personal protection. Fight or flight.



**As much as some of us would like to believe, zombies are not real. But zombie or not, if you want to win the fight, you'll need the right mindset.**

## Chapter 3

# The Modern Technique

*Diligentia, vis, celeritas*

**T**he Modern Technique of the Pistol is series of concepts originally assembled by Col. Jeff Cooper. After studying various successful pistol manipulation methods for practical shooting, Cooper added his personal perspectives of logic to create a training methodology called the “Modern Technique.” This foundation is still used today as the basis for all small arms training at Gunsite. It is a solid foundation that, when built correctly, will not wash away. The Modern Technique combines proper mental conditioning with gun handling and marksmanship skills to accomplish a balance of speed, power, and accuracy.

Marksmanship, Gun Handling, and Mindset make up the Combat Triad. The balancing of these three elements is the key to winning a lethal confrontation. Mindset, which is one side of the Combat Triad, was discussed in [Chapter 2](#). Marksmanship and Gun Handling will be covered here.

Achieving a competent level of practical marksmanship requires, according to Cooper, proficiency in the Weaver Stance, the gun presentation, the flash sight picture, and the compressed surprise break, all with the heavy duty pistol. When all these elements are executed with the proper poise and proficiency they provide an

equal balance of accuracy, power, and speed. Or, as Cooper would have said, in Latin, “*Diligentia, vis, celeritas* (DVC).”

These three terms, loosely translated to the Modern Technique, would mean:

- **Accuracy**—You must hit your attacker in order to injure him.
- **Power**—You must strike with sufficient force to incapacitate.
- **Speed**—You must strike quickly, and first.

## Weaver Stance

The Weaver Stance was developed by Jack Weaver, of Lancaster, California, for the purpose of ensuring quick and accurate shot placement with a handgun. It very much resembles a fighting stance that might be used by a boxer or mixed martial arts fighter. This stance allows you to deliver force quickly, while maintaining balance and the ability to move.

Though variations of the Weaver stance exist, the Weaver stance is more of a method than an exact pose. It is paramount that shooters are comfortable in their stance, and since we are all physically different in many ways, we should expect some variation in how each of us employs the Weaver stance. It's maybe easiest to describe the Weaver Stance one body part at a time:

1. **Feet**—About shoulder width apart with your left foot (right foot for left-handed shooters) slightly leading. This places your

feet in the best position to move, manage recoil, or maintain your balance if you suffer a forceful blow from an attacker.



**In the Weaver shooting stance, your feet should be positioned in what many consider a fighting stance.**

**2. Legs**—Your legs should be slightly bent, with your knees just above or just behind your toes. If your legs are straight, you lose the ability to move or change locations quickly. Straight legs also hinder your ability to control recoil.



**Knees should be slightly bent.**

- 3. Head**—The head is held erect, just as you would normally stand. You bring the handgun up in front of your eyes; you do not lower your eyes (head) to the handgun. Do not lean your head to one side. A head held erect allows your peripheral vision work better, and overall it's a more comfortable position. A slight bending of the neck is not considered inappropriate, but avoid the tendency to do the “turtle,” hunching or pinching your shoulders.



**Do not do the “turtle.” Do not lean your head to the side to put it behind the gun.**

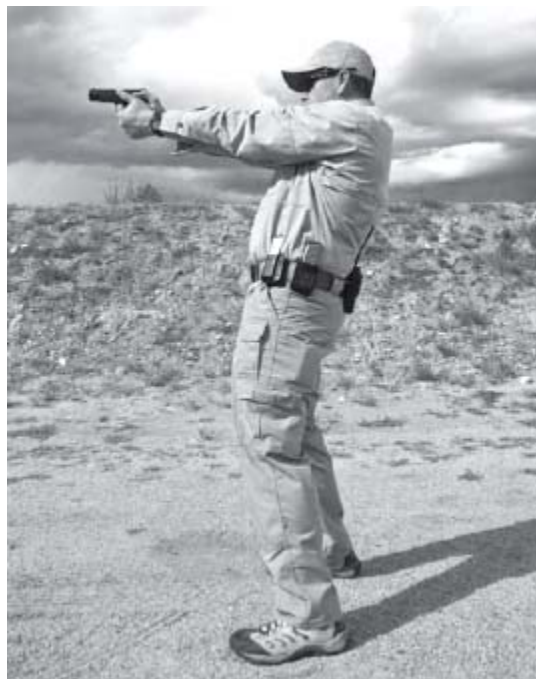


**Do not lean your head to the side to put it behind the gun.**

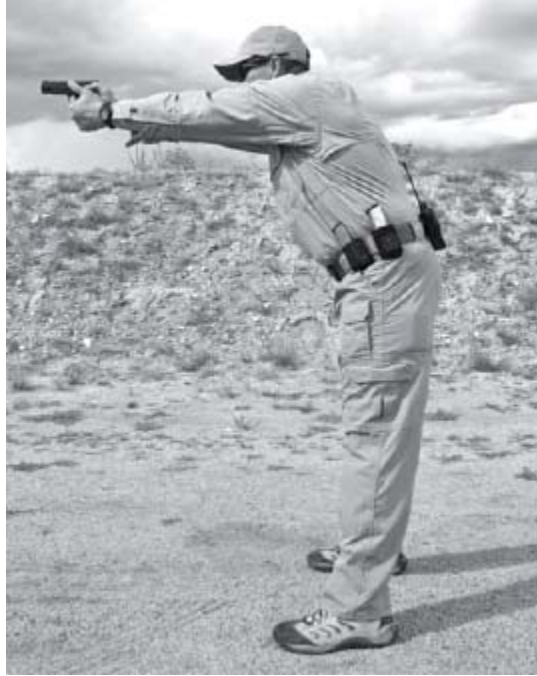




**Your head should be erect. This is where you are most comfortable and where your eyes work best.**

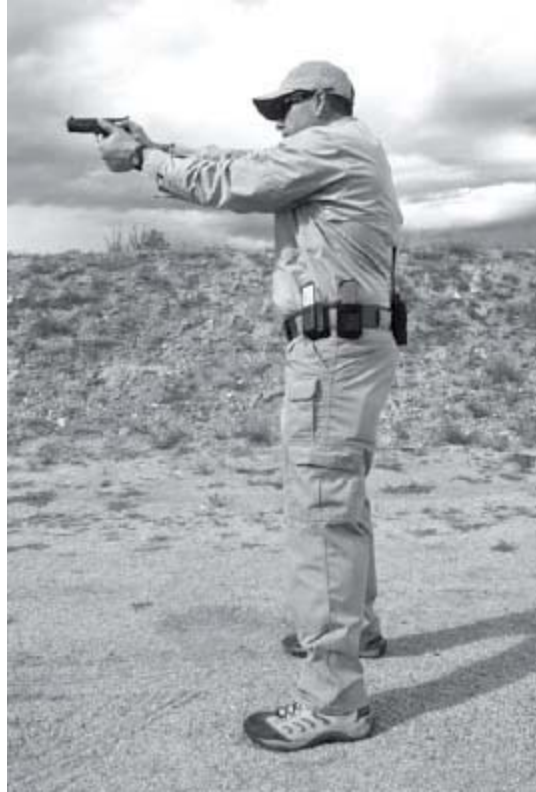


**Don't lean back like you're doing a pelvic thrust.**



**Don't lean too far forward. The goal with the Weaver Stance is balance.**

- 4. Back**—Your back is straight, but angled slightly at the waist so that your shoulders are about directly above or slightly behind your knees. This ensures your ability to effectively deal with recoil and helps maintain balance.



**Your back should be straight, and your shoulders should be almost directly above your knees.**

**5. Shooting Hand**—The handgun is gripped as high as possible so that the barrel is in line with the bone in your arm. This helps with recoil control and allows you to keep the handgun orientated towards the threat with as little muzzle rise as possible between shots. The thumb of the shooting hand is held upwards, tucked down along the grip of the handgun or pointed towards the target. With a revolver, the thumb is most often held in a downward or tucked position.



**Grip the handgun high. Place the web between your thumb and index finger as high on the grip as possible.**



**This is a bad grip. Notice the space between the web of the thumb and finger and the curve of the grip.**



**Your forearm should be in line with the barrel of the handgun.**



**This is an improper grip. Notice how the forearm is not in line with the barrel.**

**6. Support Hand**—The support hand wraps over the shooting hand, knuckles over knuckles, fingers over fingers. The support

hand is positioned high on the gun. The support hand thumb can be held over the shooting hand thumb. This is almost a necessity with a revolver. Alternately, both thumbs can be pointed up or towards the target.

- 7. Arms**—Ideally, your shooting arm will be straight. However, both arms can be slightly flexed if that is more comfortable for you. Regardless, the support arm should be bent at the elbow at something between a 45- and 90-degree angle. Essentially, the shooting hand exerts forward pressure on the rear of the handgun's grip, and the support hand exerts rearward pressure. The arms essentially form an isometric equilibrium, holding the handgun solidly in place.



**There are three basic grip methods. Here the shooter has tucked the thumb of his shooting hand under the thumb of his support hand.**



**You can also grip the gun with both thumbs pointing upwards.**



**With this grip method, both thumbs are pointing towards the target. Find the grip that is most comfortable for you.**

There are indeed arguments against the Weaver Stance, and it's true most who compete in combat-style pistol matches either do not use it or they use a radically altered version of it. However, based on my training experiences, the Weaver Stance is the easiest stance for most new shooters to learn. It is the most natural to assume, because everyone has, at one time or another, stood in some sort of a boxing stance. Too, the Weaver Stance integrates very well with other handgun manipulation and shooting exercises.





**The support hand should wrap around the grip over the shooting hand.**

It is suggested that, when you start shooting, you try to use the correct Weaver stance. As you become more comfortable shooting and as your skills develop, it is very likely you will allow this position to evolve into your own comfortable version of the Weaver Stance. This is acceptable as long as the basic form or premise of the stance is adhered to.

## **Presentation**

Handgun presentation is the delivery of the handgun from a holster or place of rest to alignment with the target. Although presentation is a single fluid motion, it is made up of five sequential steps. When done properly, and with a smooth blending of each step into the next, a presentation looks fluid and unencumbered. Here is



the presentation as it is taught at Gunsite but with comments about integrating a laser into the procedure.

- 1. Grip**—Your shooting hand goes to the handgun and you establish a firing grip with your trigger finger straightened outside the holster and parallel to the handgun's barrel. If the handgun has a manual safety, your thumb should be placed in position to disengage the safety, but the safety remains on at this time. At the same time your shooting hand is establishing a grip, your support hand should be moved to the center of your torso. The palm of the support hand should be flat against your body and the thumb should be extended and pointed towards your head.



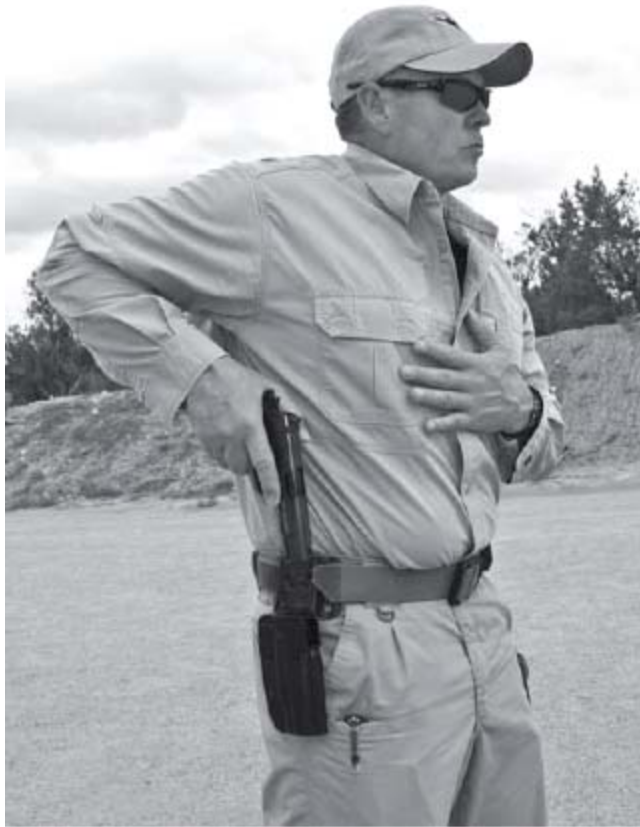
**The first step in gun presentation is to establish a shooting grip, trigger finger straight and support hand at center chest.**



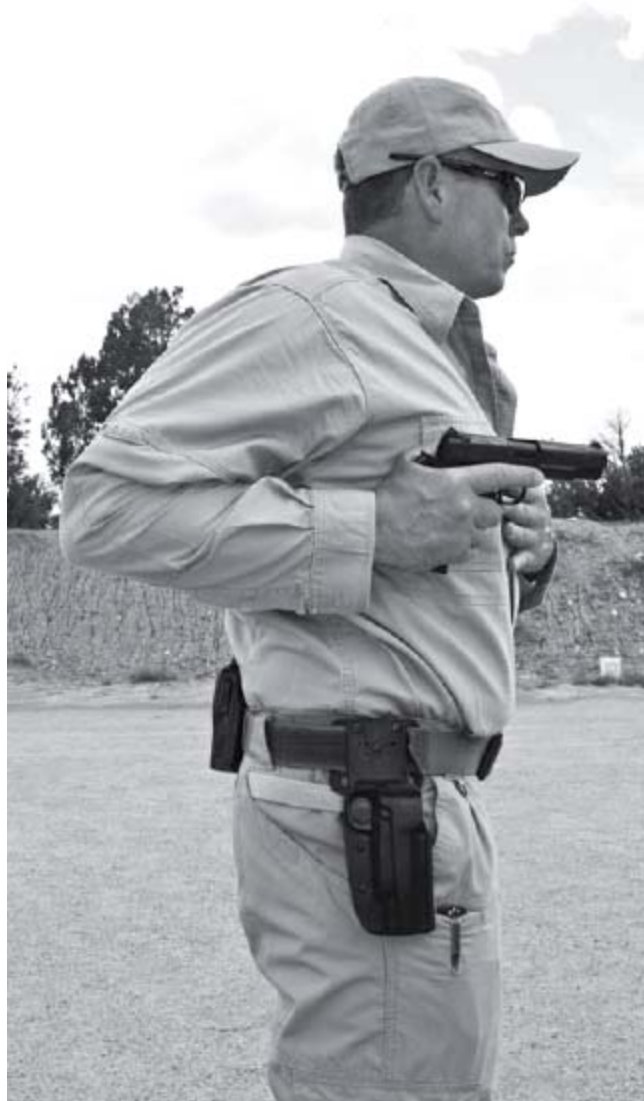
**In stage two, pull the handgun straight up until it clears the holster.**

- 2. Clear**—The shooting hand lifts the handgun from the holster until the muzzle has cleared it. The trigger finger remains straight alongside the frame. The support hand does not move.
- 3. Rotate**—The shooting hand rotates the handgun so it is orientated towards the threat and the safety can be disengaged. This rotation occurs primarily at the shoulder. At this time, your handgun should be on target. Advancing the presentation into the world of the modern handgun—which should be equipped with a laser—at this stage the laser should be shining

brightly on the target. Should the need arise, the handgun can be fired from this position. When do you put your finger on the trigger? When your sights (laser) are on the target. (RULE No. 3)



**Notice that, at the second stage of the presentation, clearing the holster, the support hand is still center chest.**



**In step three of the presentation, rotate the handgun towards the target.**



**The only thing you move during step No. 4 is your support hand, which has been center chest since you started your presentation.**

As a matter of fact, if you are engaged in an extreme close quarters situation, it may be most desirable to shoot from this position. You may be using your support hand to keep your attacker at a distance or to fend off blows. You also may be close enough to the threat that you do not wish to fully extend your handgun at arm's length for fear your attacker might grab it. If this is the case, the support hand can move to the handgun to establish a two-handed grip, or it can be used to fight off an attack.

4. **Ready**—Now move your support hand to the pistol to establish the two-handed grip you will use to fire the handgun.
5. **Engage or Look**—This step completes the presentation with full assumption of the Weaver Stance, your primary shooting platform. The sights *should be* aligned on the target and your finger *should be* on the trigger. Here you should be looking for visual confirmation that it is indeed time to pull the trigger.



**In step No. 5, the completion of the presentation of the handgun, you will be in the full assumption of the Weaver Stance, with the sights on the target and your finger on the trigger.**

Now, there are two other positions that need discussion. These are positions you will work from when on the range, but also positions you may need to assume before, during, or after an actual confrontation. These are called “ready” positions.

**1. The Low Ready Position**—It may become apparent during presentation that the need to shoot is not immediate. If so, once a two-handed grip has been established, the ready position can be assumed. With the low ready position, you have a two-handed grip and the handgun is orientated in the direction of the threat, but the muzzle is at about a 45-degree angle, ideally pointing at the ground somewhere between you and the threat or potential threat. In the low ready position, the finger is held straight and parallel with the barrel, outside the trigger guard. This is a gun-out position you might use when moving and when expecting a threat to appear (or when practicing on the range).





### **Low ready position.**

**2. The High Ready Position**—The high ready position differs from the low ready position in that the handgun is on target but held just low enough that the target can be seen clearly. Without a laser, the sights should be aligned to point at the pelvic area of your attacker and your eyes should be intently watching for a visual clue that it is time to shoot. Given that clue and pelvic area sight alignment, you can pull the trigger immediately or raise the handgun for a center mass shot and then fire. If your sights are on the target, your finger is on the



trigger. However, just because you are in the high ready position does not mean your finger *must* be on the trigger. Your finger being on the trigger is dependent on your sights being on a target. Depending on the circumstances, you might actually be moving in this position or you might be waiting behind cover for an opportunity.

From the standpoint of the modern, laser-equipped handgun, the high ready position involves lowering the handgun just enough so that the full threat can be seen over the handgun. However, the laser sight remains center mass so that, if necessary, you can engage without having to reacquire the sights.



### **High ready position.**

When should the high ready position be used? Immediately after engagement, when you are attempting to assess the situation, or immediately prior to shooting an attacker you may have been holding at gunpoint, or one who is possibly on the brink of crossing the line that would allow the use of deadly force.

Another ready position tracks back to position three. As soon as the handgun is rotated towards the target and the laser is seen on

the target/threat, you have established the laser-ready position. In this position, you can engage a threat as needed without any further movement.

As a side note, the question that always surfaces is, “When should/can my finger be on the trigger?” The answer is simple: anytime you have confirmation your sights are on target.

## Holstering

Ninety-nine times out of 100, you should never be in a hurry to put your handgun back in your holster. When you holster your handgun, you are giving up a large amount of control over any situation. So take your time returning the handgun to its resting place, not only to ensure you remain in control of a bad situation, but because one of the most common instances in which someone shoots themselves is when they try to holster in too much of a hurry.

When you have decided it is time to holster, you should probably be in a ready position; the situation has been assessed, ammunition concerns have been tended to, and no threat currently exists. At that time—*with your finger out of the trigger guard and extended parallel to the barrel*—you can engage the safety and move in reverse through positions three, two, and one.



**At the point you decide it is time to holster, remove your finger from the trigger and extend it straight along the frame of the handgun.**

## **Flash Sight Picture**

The flash sight picture is exactly what it says. It is nothing more than a visual recognition that it is the correct time to fire the handgun. What most shooters do not understand is that to get vital

zone hits at defensive handgun ranges, it is *not* necessary to perfectly align the sights on the exact spot you want to hit.

This will be further discussed in the chapter on handgun sights, but consider the notion that a flash sight picture is nothing more than a visual indication it is time to pull the trigger. When you master the secret, you will better understand how what you are essentially doing is pulling the trigger of your handgun with your eyes.

## Surprise Break

Cooper taught and believed in the surprise break when pulling the trigger. In other words, he felt you should be surprised when the handgun fired. This is indeed, and almost without question, the best way to learn the secret. If you anticipate when the trigger will break (causing the gun to fire), you will almost, without fail, flinch or jerk the handgun off target.

Ideally, with the surprise break, you ever increase the pressure on the trigger until it breaks, firing the gun at a moment during which you were expecting the bang, but did not know exactly when it was coming. Cooper called it a “compressed surprise break,” and the more difficult the shot, the less the break was compressed, meaning the smaller the target and/or the longer the distance to that target, the longer the time between when you start applying pressure to the trigger and when the shot should break.

When it comes to teaching a new shooter or a shooter with accuracy problems, the surprise break is the only method to teach. Actually, it is the *best* method to teach regardless the student, but, somewhat ironically, once a student has mastered the secret, they

should never be surprised when their handgun fires. You do not want to set before a jury and have to admit you were surprised your gun fired and mortally wounded the man who was attacking you. You don't want to explain how you had time to gradually apply ever increasing amounts of pressure to the trigger until the gun fired and that you were surprised when it did. No. Someone who has mastered the secret by conducting the 3,000 to 5,000 repetitions it takes to get there should know exactly when their handgun will fire, and they need to be able to say, "At this precise moment I knew I had to shoot to save my life, and that's the exact time I pulled the trigger."

Learn with the surprise break, but learn well enough you don't need to use it. This may seem to be in direct contradiction to the Modern Technique, when it is actually no different than the proper execution of handgun presentation. Handgun presentation has five distinct steps, and entwined in those steps are various points where decisions must be made. However, when a shooter properly executes the presentation of his handgun, it is with one fluid motion. It is a feat that can be accomplished only after thousands of correct performances.

The difference between Cooper's compressed surprise break and knowing the exact moment when your handgun will fire is no different. After thousands of correct compressed surprise breaks, you will indeed know when your handgun will fire—and even then there will be situations and conditions that require you to rely on that compressed surprise break to ensure you hit the target.

## **Semi-Automatic Pistols in Large Calibers**

Cooper's idea of a semi-automatic pistol in a large caliber was a 1911 in .45 ACP. He did not appreciate the 9mm Luger and figured the .45 was twice as effective. Gunsite currently defines Cooper's semi-automatic pistol in a large caliber as a "heavy-duty pistol," meaning "the pistol must be sufficiently robust and powerful to hold up in a combat environment and stop a fight." This could be any number of modern and even not so modern handguns. Cooper's prime suspect was the 1911, a gun that has been with us for 100 years and is still a viable candidate. So are many, many other handguns.

Handgun selection is an important part of any equation, when it comes to personal protection with such a tool, and we might as well touch on it here. Advice, in the simplest form, could be to select the largest, most reliable handgun in the most powerful cartridge you can and will carry on a daily basis and that you can use to deliver fast and repetitive shots on target. If that handgun turns out to be Dirty Harry's .44, more power to you. If it's Bond's little Walther, so be it. (RULE No. 6)



**Eventually, if you shoot them enough, you will experience a failure with any handgun. That failure may be due to the gun, the ammo, or the operator. As a minimum, ensure your handgun will cycle at least 50 rounds of your carry ammo malfunction free.**

You have to have your handgun on you in order for it to be of any value. If it is too big or too heavy, you'll leave it in the car or at home. Give this serious consideration, when selecting a handgun you intend to carry. All over America, there's a movement for concealed carry, and gun manufactures are learning it is the compact handguns that have the most appeal. This is because, for most folks, that's all they can comfortably or will carry on a daily basis.

Nobody likes to dress like a perverted flasher. If we did, we could all carry shotguns. Experiment with different handguns and different



holsters until you find something that works for you and ignore that tac-tard on television who's telling you this or that gun or cartridge isn't sufficient for self-defense. You cannot defend yourself or your loved ones with a handgun you do not have.

Of course, your handgun also has to be reliable. What constitutes acceptable reliability? Cooper suggested no more than one malfunction in 1,000 rounds. No matter your handgun, shoot it enough and it will malfunction either due to the ammo, the shooter, or because of its design. Maybe the gun gods have foretold that your pistol will function perfectly for 1,005 shots, but will jam on shot number 1,006 or 1,050. If you can run 50 rounds of defensive ammo through your handgun without a malfunction while conducting practical drills, then trust that handgun/ammo combination until you have reason not to.

As we've just explored, Cooper's Combat Triad was made up of three elements, Marksmanship, Mindset, and Gun Handling. We have already touched on marksmanship and mindset. Both subjects will continue to be touched on throughout this book. Gun handling, beyond presentation, is a bit more complex subject, due to the fact that there are so many different kinds of handguns. But what we can do is identify a laundry list of activities that cover all the elements of weapon manipulation you should be able to perform. (RULE No. 7)

**1. Loading**—Though the types of handguns suited to concealed carry/personal protection vary a great deal, they generally come in two forms, pistol or revolver. For the most part, all pistols are loaded in the same manner, as are all revolvers.

For a pistol, start with the gun unloaded and retrieve a magazine. It should be held in your support hand with the tip of the index finger touching the top cartridge, and the bottom of the magazine in the center of your palm. Insert the magazine into the magazine well and fully seat it with force. With the pistol pointed in a safe direction, reach across the top of the pistol with your support hand and grasp the slide. Your thumb should be pointed at your chest. Pull the slide fully to the rear and *let it go*. Do *not* ease the slide forward. Allow the recoil spring to exert its full force, thus returning the pistol into battery. Next, engage the safety if so equipped.

At this point your pistol is loaded, but your magazine is now one round shy of being full. Remove the magazine, holster your pistol, and top off the magazine with one cartridge. Now you can remove your pistol from the holster and insert the magazine again, producing a full combat load.



**Hold the pistol magazine with your index finger along the front of the magazine.**



**Find the magazine well of the pistol with the index finger of your support hand and guide the magazine into the magazine well.**



**Grasp the slide with your support hand, fully retract it, and let it go.**

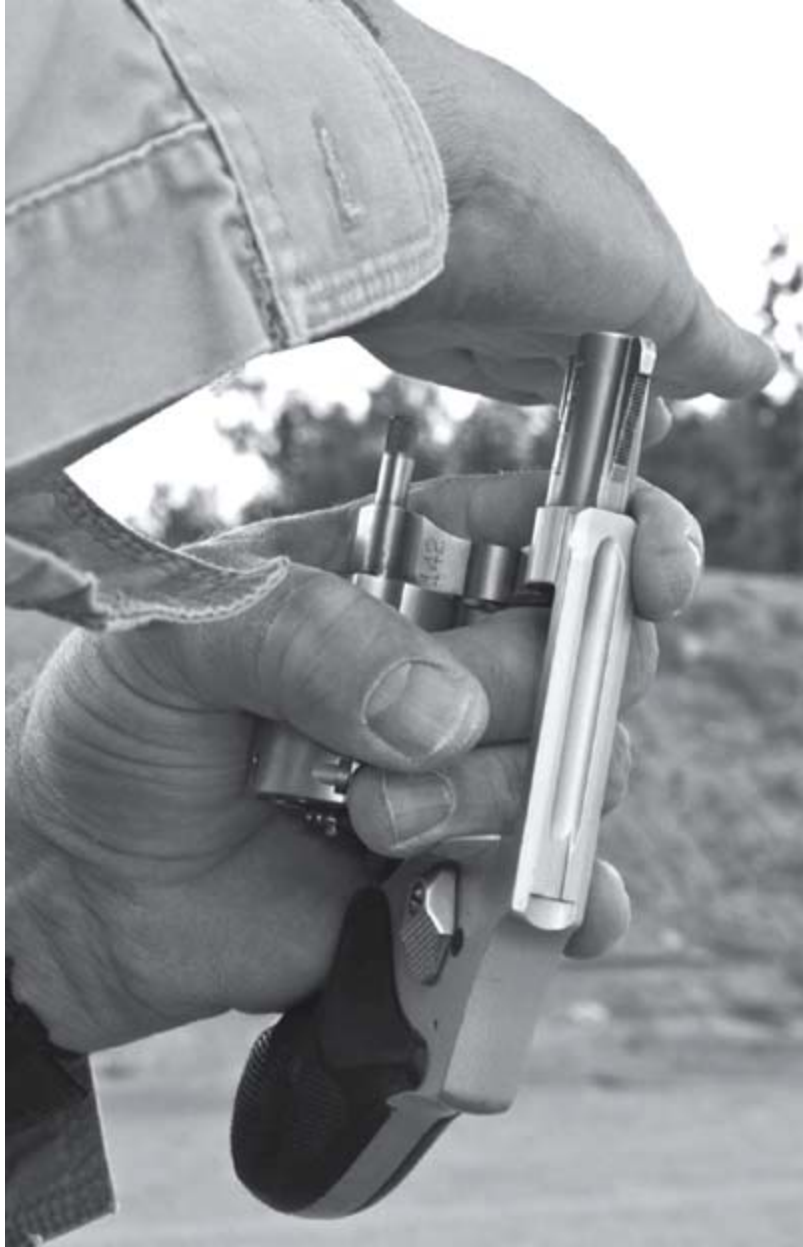
To load a revolver, place the revolver in your support hand so that your social and ring fingers are wrapped around the cylinder. Depress the cylinder release with your shooting hand thumb and push the cylinder out of the frame with the same two fingers. You should now be holding the revolver by the cylinder, between the thumb and those fingers of your support hand. Either by inserting individual cartridges or by using a speed strip or a speed loader, load every chamber in the cylinder, close the cylinder, and holster the revolver. If you are a left-handed shooter, load a revolver as if you were shooting right-handed.



**Regardless which hand you shoot with, hold the revolver in your left hand when loading, pinching the cylinder between your thumb and the social and ring fingers of your support hand.**

**2. Unloading**—With a pistol, you'll point the gun in a safe direction, with the safety engaged if so equipped, and remove the magazine. If the pistol's safety locks the slide in battery, it must be disengaged. Otherwise, leave the safety on, retract the slide in the same manner you used when loading the pistol, release it, and let it cycle back into battery. The cartridge that was in the chamber should have been ejected and fallen to the ground. Now, retract the slide and visually confirm that the chamber is empty. It's also a good idea to lock the slide to the

rear and, using the pinky finger of your support hand, feel inside the chamber to manually confirm the pistol is unloaded. This is a good procedure to follow, especially when it's dark.



**When unloading a revolver, forcefully slap the ejector rod with the palm of your right hand.**



### **Condition check.**

To unload a revolver, place the revolver in your support hand so that your social and ring fingers are wrapped around the cylinder. Depress the cylinder release with your shooting hand thumb and push the cylinder out of the frame with those same two fingers. You should now be holding the revolver by the cylinder, between the thumb and those same fingers on your support hand. Point the revolver up—vertically—and, using your right hand, slap the ejector rod at the front of the cylinder. This should cause the ejection of all fired and unfired cases from the cylinder. If you are a left-handed shooter, unload a revolver as if you were shooting right-handed.

**3. Condition Check**—A condition check is conducted to determine the status of a handgun, i.e., to see if it is loaded or unloaded.



With a pistol, retract the slide as done when loading, but only partially, just enough to determine if a cartridge is captive under the extractor. If no cartridge is seen or felt with your trigger finger, cycle the slide to load a cartridge from the magazine or conduct unloading procedures if required. If a cartridge is identified in the chamber and it is desirable that the pistol be loaded, release the slide, eject the magazine into your support hand and verify its condition. With practice, both the chamber check and magazine check can be conducted by feel so that the condition of a pistol can be confirmed in total darkness or while your attention is directed elsewhere.

In a way, it's both easier and more difficult to check the condition of a revolver. Regardless, if you are trying to determine how many cartridges in the cylinder have not been fired, it is a visual exercise. Open the cylinder as when loading and visually determine if the cylinder chambers are loaded. If that is all you are trying to confirm you can do it by feel. If possible, visually determine if the cartridges in the chambers have been fired by looking at the primer for an indentation. Depending on your circumstance, you will have to decide on the condition the revolver should best be in, i.e., unloaded, partially loaded, or fully loaded. In darkness, or just to be double safe, use the thumb of your right hand to feel each chamber in the cylinder to confirm it is empty.



**You can determine by feel if there are any cartridges in a revolver's chamber. However, you will have to look to see if those cartridges have been fired.**



Lastly, we should further explain what Cooper meant by “Accuracy, Power and Speed.” These are the three critical elements you must juggle to produce the desired result on target. If you miss, you cannot hope to stop the attacker. If you hit but your hits were slow in coming, you might stop your attacker, but it may be too late. And, if you do not hit your attacker with enough authority (power) it may not matter how fast or accurate you were.

Defining a minimum for each of these elements is almost impossible. In short, you should be accurate enough you can always hit what you need to. You cannot be too fast and, at least as far as defensive handguns go, you can never have enough power. Accepting these definitions, you are left with trying to find a balance of all three. The training exercises that follow will help you make some decisions about your abilities with your handgun, and

even the type of handgun you should use. You will also learn how to practice to improve your skills.

As stated in the introduction to this book, my intent is to integrate the modern handgun and tools like express sights, lasers, lights, and ammunition into the philosophy that has driven the art of the defensive handgun since Jeff Cooper first developed the Modern Technique. To become proficient in defending yourself with a handgun, all you must do is integrate the secret—sight alignment and trigger control—the principles of personal-defense, the Modern Technique of the Pistol, and a little common sense.

## Chapter 4

# Handgun Sights

*“That little bump near the end of your pistol is called the front sight. Use it!” —Gunsite Instructor Charlie McNeese*

A handgun sight is on a pistol for one purpose, to help the shooter accurately place their shots. Early handgun sights were moderately effective in a non-chaotic target shooting environment, but were miserably deficient in a combat situation. This was because they were small and hard to see. If you look at handgun sights through history, it is glaringly apparent they have gotten, with time, bigger and easier to see.



First we saw what many now consider to be target sights. These were all-black sights made up of a square front post and a rear sight with a notch. When looked through, the shooter lined up the front post in the rear notch so that the top of the post was level with the top of the notch. On each side of the post, the shooter could see a slim sliver of light. This is how the shooter confirmed the sights were properly aligned.

Target sights allow very precise target work, because they telegraph to the eye even minimal deviations in alignment. From a defensive handgun standpoint, target sights are almost useless, because they are tedious to align and because they also require very good light for the shooter to distinguish those thin slivers on each side of the front post.

The first real advancement in sights was pioneered by Wayne Novak. He took the common notch-and-post format and widened the rear notch to let in more light on either side of the front post. He also did something else that was smart: he streamlined the profile of the rear sight so that it wouldn't snag on clothing when you tried to draw the gun, and so that it would not remove a large chunk of meat from your hand when you were manipulating the pistol's slide.

Other manufactures followed suit with similar sights of snag-free design, and then something else happened. The long tradition of offering adjustable sights on handguns began to lose favor, and fixed sights adjusted at the factory became the standard for defensive handguns.





**The sights on this originally styled 1911 are hardly visible at all. In good light and under calm conditions, sights like this will work. Under stress and in low light, they are almost useless.**







**This Kimber Stainless Target in 9mm is fitted with adjustable target-style sights. They are indeed great for target shooting, but lack the ease of visibility desirable for combat shooting.**



**When looking through Novak-style sights, they offer a crisp image that's desirable for target work. However, with most Novak-style sights, the rear notch is too narrow, and this slows down sight alignment.**



**The Novak-designed rear sight has been copied by many manufacturers, but the style is basically the same, a wedge-type rear sight that is snag-free and has a slightly wider notch than is common on target sights.**



**Most often the Novak rear sight is combined with a square post front sight. Just as common are two white dots or tritium vials (night sights) on the rear sight and a white dot or night sight on the front sight.**



**Though not really a Novak sight, the sight Smith & Wesson uses on its M&P line of pistols continues the same low-profile, snag-free concept.**



**By placing the top of a pistol's slide against the bottom of your boot and applying pressure, you can easily cycle the slide with one hand.**

Some super-tac-tards claim that snag-free sights aren't a good choice, because you need to be able to hook the sight on your belt so that you can operate the pistol's slide if your support hand

becomes injured. I never bought into this idea for several reasons. Most folks do not wear belts with their pajamas, and, if you're dressed, you can easily operate a pistol's slide by pressing the top of the slide against the bottom of your foot and pushing the handgun forward.

At any rate, the next big thing with pistol sights was night sights. It started with a front sight that had a tritium vial inserted inside it. This was indeed a good idea, but originally, the quality of those sights left something to be desired; the tritium vials would break or the glow wouldn't last more than a year or so. Trijicon quickly became a leader in this industry and set the standard with regard to tritium and tritium vials. Companies like Meprolight followed suit, and now, by and large, night sights are dependable.

Somewhere along the line, someone got the big idea that putting additional tritium vials, one on each side of the notch in the rear sight, was a good idea. It did indeed make for a very cool looking sight picture, but, just as it had been with three-dot non-tritium sights, it was more of a novelty than a necessity or good idea. The last thing a shooter needs is the rear sight drawing their attention away from the front sight and/or the target. Three-dot proponents argued, "Just line up the three dots and pull the trigger." Savvy gun guys said, "Front sight, press."





**Meprolight (top sight set) offers a wide range of dependable, aftermarket tritium night sights for many handguns. They are the standard sight on all Kimber handguns. Trijicon (bottom) has long been a supplier of tritium night sights and even tritium vials to many manufactures. That company, in a way, set the standard. It now offers what it calls “HD Night Sights,” which feature a wide U-notch in the rear sight and a much larger than normal front sight.**

It really doesn't matter which side of the fence you fall on, the shooting public and tac-tards alike bought into the three-dot (tritium or non-tritium) concept, and it is now the industry standard. That does not make it right any more than calling an AR-

15 a “modern sporting rifle” makes it less offensive to the anti-gun groups.

Two other things began to happen with handgun sights. Rear notches started to get even wider, and fiber optics became the less expensive option to tritium. Widening the rear notch was a good thing. It made sight alignment much faster and, for the combat shooter, it did not detract from accuracy. As for fiber optics, the jury might still be out. They are popular enough that many manufacturers offer them as standard sights on their handguns and, to some extent, competition shooters trust them, too. A wide selection of aftermarket fiber optic sights is available from TruGlo.





**The three-dot sight system, whether just white dots or tritium vials, has become the industry standard. This is a product of the gun press preaching its virtues and convincing shooters such sights are what they need more so than it is manufacturers offering what actually works best.**



**These TruGlo sights are interesting because they offer the brightness of fiber optics in the day, or tritium in low light.**

Fiber optics are indeed easy to see in daylight hours and, in some instances, fairly visible in low light. I've found they are very good to use when working with a new shooter. Bill Wilson at Wilson Combat used a fiber optic green front sight combined with his all-black, Battlesight rear sight on my son's 1911. It was simple to describe to my son Bat that he just had put the green dot on the target and in the big notch and then pull the trigger.



**This Battlesight rear sight combined with a fiber optic front sight is available from Wilson Combat and has proven to be a workable, non-tritium, easy-to-see option.**



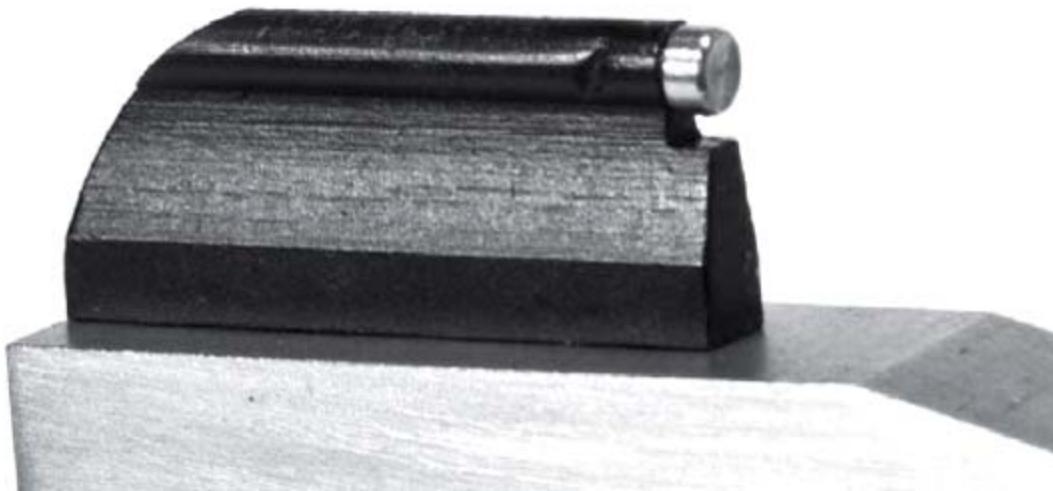
This fiber optic craze, just as with the white dots and tritium dots, has spread to the three-dot configuration with a front sight of one color and the two rear dots of another. Can it work? Absolutely. Does it look cool? Definitely, and especially if you are a color-

conscious lady, or a man who is well in touch with his feminine side. Is it the best approach? Maybe, maybe not. All eyes are different. Based on the range experiences of people I trust and my own testing, I think not.

Regardless, if you are shooting with traditional sight alignment, whether a flash sight picture or with a target focus, you need to see the front sight. You do not want bright dots on the rear sight confusing your brain or your eyes or detracting your concentration from what it is you need to hit. Even with target focus shooting, which will be covered in the [next chapter](#), the front sight or the laser—not the rear sight—is the champion.

Some like a more simple approach to sights, nothing more than a gold bead affixed to the rear of the front sight, and a plain and wide, all-black rear notch. Based on the instances where I've had to point guns at folks, this type sight will probably work just fine 90 percent of the time. I'm not convinced its optimum, and a man by the name of Ashley Emerson wasn't convinced that it or any other standard type handgun sight was either.

But, let's step away from this argument about which sight is better. Chances are, it is more than likely something you will have to experiment with and learn on your own. While we are all humans, our brains all work differently. What might work well for me may not for you. Let's now focus, instead, on how you should line up your sights, how slight deviations in alignment can impact your shooting, and how and at what distance your pistol should be sighted in.



**A gold-beaded front sight will be easy to see most of the time, but in low light it is probably not the best choice.**

When sighting your handgun at a target or a threat, you will need to decide if you want to aim with the top of the front sight or all of the front sight. Let's keep in mind that most defensive shootings occur at relatively close range, so even a very wide front sight will only cover a spot about the size of a half dollar out to around 15 yards. If you aim with the top of the sight, your eyes beg to see the top of that front sight on a very small reference point. Essentially, you are treating the front sight like an arrow and using it to point at something. On targets this can work just fine, though it can take an extra portion of a second to achieve this type of alignment.

When shooting at just a silhouette target or a bad guy, you don't have time to find a small reference point—and there may not be one. You will have conditioned your eyes to look for something that is not there, and when your eyes cannot find it, they will not send the signal to your finger to pull the trigger. Additionally, if it is dark enough, you are relying on your night sights—not a laser—for

shooting, and you'll not be able to see the top of the front post anyway.

Covering the available center mass of the target with the front sight post, glowing dot, or gold bead is faster and something you can do regardless a definitive aiming point or available light. Simply cover the center of what you want to shoot with the front sight and shoot. Is it accurate? Sure. And it's fast.

You may also be curious about how slight deviations in sight alignment will cause your bullet to deviate from your point of aim. That's a good thing to know, because it will help you learn what a good sight picture is and is not. In other words, you need to know how much leeway you have to operate in when looking. This is applicable in all aspects of life. Like when ladies are lusting after shoes or diamonds, or when a man sneaks a look at that big-busted blonde. Will your wife brain you with a bottle of beer? You need to know how much *looking* room you've got.



**Meprolight offers a fully adjustable tritium rear and front sight that can be used to replace the all-black target sights on**

**Kimber 1911s. Other companies offer fully adjustable tritium sights, too.**



Probably the best way to demonstrate this is to zero your handgun-mounted laser so it shines on a target at 10 yards at a point about an inch above where your front sight appears when it is properly aligned with the rear sights. Now, play with your sight picture by moving the front sight to the far side of the notch, by moving it just above the rear notch and by sinking it deeper into the rear notch. Observe how much the laser dot moves and make a mental and visual note telling yourself that you can actually move that front sight around a good bit without getting completely off target.

Now you have just discovered something else. All those sight impressions you just witnessed, those where the laser dot remained inside the kill zone, are your flash sight pictures. When a flash sight picture is referenced in this book, it is not a reference to perfect sight alignment. It is a reference to any sight picture that will allow you to get a hit inside the kill zone at any distance.

Obviously, as the distance increases, the amount of variance from a perfect sight picture that can be allowed will decrease. But now you know, you have seen, that to get a kill zone hit at common gunfighting distances, your sight picture can be somewhat imperfect.

And, so, how much does distance matter? With regards to where your handgun is sighted in, not that much. If your handgun shoots to its exact point of aim at 25 yards, that's fine. If that distance is 15 yards, you're still fine. There's not enough variance in defensive handgun cartridge ballistics to matter inside 25 yards. But what if it's not sighted in? How do you correct that?

If your handgun is shooting to the right of your point of aim, move the rear sight to the left. If it's shooting to the left, move it to the right. If your handgun is shooting low, raise the rear sight, and if it's shooting high, lower the rear sight. Sight corrections for the front sight are just the opposite. However, on fixed-sight handguns, most horizontal sight corrections should be made with the rear sight. To correct for elevation, you will most often need to replace the front sight.

Why not just select a handgun with adjustable sights? I don't know, why not? Some claim they are not as durable as fixed steel sights, and that's probably true. However, I'm convinced they are as

durable as any fiber optic sight. If you want an adjustable sight, go for it. However, you will find very few express sights that are adjustable and, from a defensive handgun standpoint, express sights are, like a friend says, “The cat’s ass.”



## Chapter 5

# Express Sights

*“Friends don’t let friends carry target sights.” —Dave  
Biggers*

I never got to meet Jeff Cooper. I have met his widow, Janelle. While at Gunsite, several of us writer types were swept off to the Sconce for a short visit. After I was introduced to Mrs. Cooper, and she said, “I know who you are, I read your articles.”

I cannot think of a higher point in my gun writing career. To be recognized by Janelle Cooper and to know she reads what I write.... I’m sorry, send me all the nice letters and e-mails you like, they will all be placed behind that memory.

To an extent, this is partly due to the fact gun writers, at least this one, do not get a lot of fan mail. If I write something someone likes, they just like it and, as they should, continue on with life. On the other hand, those who read something I write and which they do not like feel it is their duty to tell me about it. For example, in an article for *American Rifleman*, I wrote about the Weaver Stance. Soon after publication, I received a letter from a man who was, um, pissed off.

In the span of two pages he proceeded to tell me I knew nothing about shooting, that I was living in the dark ages with my Weaver and isosceles stances, and that if I really wanted to know how to shoot a handgun I should check out the videos on his website. I

thought *Gees, what have I missed?* I went to his website and watched videos of a man shooting into a stick from the hip at a range of about two feet.

Another article for *American Rifleman*, which detailed my thoughts on defensive handgun ammunition, was also met with high criticism. The article was about an initial study I'd conducted and later expanded upon and revised. In fact, you will read about my latest discoveries and assumptions with regard to defensive handgun ammunition here in this book. In short, I failed to speak positively about the favorite cartridges and loads of many of the readers. Many of those readers felt I had insulted certain cartridges, which, for what its worth, do not have feelings. Though there were a few well-done commentaries, roughly at a ratio of about one in 10, for almost two months I answered letters and e-mails from folks who thought I was off my meds.



**Jeff Cooper's Lightweight Colt Commander with an early XS Sights express rear sight.**

What does that have to do with personal protection with a handgun? More than you think, actually. Last year, I was putting an article together entitled “The Third Triad,” about the long association between Col. Cooper, Gunsite, and Colt's. During my research, I ran across a Lightweight Colt Commander that, according to Gunsite's current director of marketing, Jane Anne Shimizu, was the pistol Cooper carried for the last 15 years of his life.

Janelle Cooper allowed some photographs to be taken of the pistol, which was unremarkable save for two facts: Jeff Cooper's hands had been wrapped around this pistol numerous times, and it was fitted with XS Big Dot sights.



**Cooper's Lightweight Commander was fitted with an XS Sights Big Dot front sight.**

Why would the father of the modern technique of the pistol have XS Big Dot sights on his handgun? Cooper, from what I know about the man, was of the serious sort. He also was adamant that a handgun should have on it, "sights you can see." Without question, XS sights are serious sights and are the most visible sights you can put on a handgun.

The first time I ever participated in Simunition training was in Texas, at Bill Davison's Tac Pro Training Center. Dave Biggers, who worked at XS Sights at the time, handed me a pistol with an XS Big Dot sight, and sent me into a dimly lit room. I came out about two minutes later with several welts from Simunition rounds that had found their mark.

Biggers looked at me and said, "Well, whadya think?"

With pain in my eyes, I looked squarely at Dave and said, "I want a bigger front sight!"

When you face the potential of serious pain or death and you are trying to point a handgun at the person who is causing that pain or lethal threat, *the last thing you want to have to do it to look for your front sight*. You want it to stand out like a beacon to a lost sailor, like the light at the end of the tunnel, like a pimple on a porn star's ass; you want to see, not look for, that sight.

XS Big Dot sights for handguns were conceived by a former Texas deputy sheriff by the name of Ashley Emerson. Ashley is best described as a long drink of sulfur water. Some folks just can't take him. He is as opinionated as a cactus is prickly and will not hesitate in sharing his opinion—with anyone.

None of that really matters. What matters is that Ashley had a great idea. Fundamentally, Emerson took the sighting concept that has been used for years on dangerous-game guns and adapted it to handguns, that being a big, easy to see front sight matched with a shallow "V" rear sight. Granted, the Big Dot design has changed somewhat from Ashley's original concept, but the theory is still the same.

Currently, XS offers two versions of what it calls the 24/7 (meaning you can see it at any time) sight. The Big Dot is a white dot that measures almost  $\frac{2}{10}$ -inch across. The smaller standard dot measures  $\frac{1.5}{10}$ -inch across. Both have a green tritium vial in their center. The rear sight has a shallow “V” instead of a notch, and most have a green tritium placed vertically at the center of the “V.” You use this sight just like you use any handgun sight. You place the dot over the target and in the center of the “V.”



**With the XS 24/7 Sights, the rear sight mimics the shallow “V”-type sight common on dangerous-game rifles. There is a vertical tritium vial at the bottom center of the “V.”**



**The Big Dot version of the XS 24/7 Sight system is large by any standard. It is, without question, easy to see.**



**For those who feel the Big Dot is too large, the standard dot is an option.**



**To those who have not tried them, the sight picture offered by the XS Big Dot sight is not refined enough for accurate shooting. This is a case of either failure to give the sights a try or an inability to shoot.**



## SIGHT PICTURE COMPARISON



STANDARD, THREE-DOT,  
NOTCH AND POST SIGHTS



XS SIGHTS, 24/7 BIG DOT SIGHTS

### **Standard notch-and-post and XS Sight comparison on target.**

Opponents of this sight system say the front sight is too large, that it will cover too much of the target, preventing you from making a precise shot. At 10 yards—30 feet—the Big Dot front sight will cover about two inches of the target. If you are required to hit a target smaller than two inches at 10 yards, you need a rifle, not a pistol.

Those proponents also claim the lack of a rear notch prevents you from establishing precise sight alignment. To an extent, this is true. You cannot align a Big Dot sight as precisely as you can a target-style notch-and-post sight. The good news is that, for defensive handgun type shooting, you don't need sight alignment that precise, you need *fast* alignment! If you can hit a five-inch circle every time at 10 yards, you are good enough, and the faster you can hit it, the better off you are.

How precise can you shoot the XS Big Dot sight? That depends on you more than the sight. Those who speak out against the XS Big Dot/express sight concept have never tried it or, if they have, they did not give it an adequate chance—about 100 shots—so as to make a truly informed decision.



**Focusing on the front sight takes time away from your shot and is not necessary at close distances when a handgun is fitted with an XS Big Dot sight. When at close range with this sight, focus on the target.**

**Target Focus Shooting**



Shooter focused on  
the target.



Shooter focused on  
the rear sight.



Shooter focused on  
the front sight.

The Big Dot sight makes target focus shooting possible with open sights. Target focus shooting is where you never look at the target out of focus; you don't switch your focus from the target to the front sight when it comes into view. Instead, you just stay focused on the target and put the front sight on top of it (demonstrated in the above pictures with a six o'clock hold, to better represent how the clarity of the target should be, depending on your visual focus).

Target focus shooting only works at close range, depending on your eyes, probably out no further than three to five yards. At distances where you can leave both eyes open, focus on the target and still verify the sight is aligned center mass.

Target focus shooting is easy to do with a laser, because you are focusing on the target and that is where the laser dot is. The smaller your front sight gets and the smaller the rear notch is in the rear sight, the more difficult target

focus shooting is, because you cannot see the sights without focusing on them.

Some will refer to target focus shooting as point shooting. It's not. Point shooting is shooting without the aid of sights. Some claim target focus shooting is nothing more than indexing the silhouette of the handgun over the center mass of the target. It's not that either. With target focus shooting, you are still looking for a flash sight picture. The difference is that, with target focus shooting, the target, not the front sight, is what's in focus. The key is having a front sight you can see without having to focus on it.



Case in point, Caleb Giddings, who was a contestant on the first season of *Top Shot*, was somewhat vocal in his notion that XS Big Dot Sights were not a good idea. We were at Gunsite at a media event and, to Caleb's credit, he took the time to give them a chance. Regardless of whether you liked the *Top Shot* show or not, trust me, Caleb knows how to shoot a handgun. After a hundred rounds or so, Caleb come to me and said, "I see what you're talking about. These sights work."

They work because you can see them and because you don't have to look for them. They work so good that Trijicon, a leading manufacturer of aftermarket and OEM handgun sights, has started making a sort of copy. Well, at least it's making a sight that includes a big front sight; Trijicon's big front sight comes with a rear sight with a wider notch, as opposed to a "V."



**XS Sights are gun specific, meaning you'll need to order a specific sight for each gun.**



**XS Sights for most handguns come with everything you need to install them. However, it is suggested you get a competent gunsmith to do the work. Alternately, you can send your handgun or your handgun's slide to XS for installation.**

Here's another example: My wife's first trip to Gunsite was as part of a ladies event for the industry. The idea was to expose a lot of women to a lot of different handguns and get feedback. She was having some trouble getting consistent hits, and Dave Biggers took her to the side and handed her a Colt New Agent fitted with XS Big Dot sights. Dave told her to simply, "Put the big dot on the target and pull the trigger." She did and she hit—time after time again.

Based on my experience working with new shooters, the XS Big Dot sight is a great teaching tool, because it circumvents the shooter's mental desire to try and achieve that perfect sight picture. You could say that, with the Big Dot sight, there is no such thing as a perfect sight picture—or you might say a perfect sight picture is much easier and faster to find. Either way, what matters is that

shooters quickly respond to the notion that all you have to do is put the dot on the target, rest it in the “V,” and pull the trigger.

When you add speed into the equation, the Big Dot sight does something else. Since it is so easy to see, it decreases the amount of time and effort you need to expend to obtain that flash sight picture. It is also easier to pick up during recoil, simply because it's easy to see.

When I took my 250 Pistol Class at Gunsite, I used a Para-Commander fitted with XS Big Dot Sights. Par score on the El Prez drill is 60 and a good score is 45; I shot the high score for my class; 72. On the school drill that ranges back to the 25-yard line, a perfect score is 60 and a good score is 35. With the XS Big Dot sights my score was 51. I also used that same pistol to win the man-on-man class shoot-off. For what it's worth, that pistol was the only one in the class fitted with XS Big Dot sights.

I'm not bragging about how well I can shoot. There are plenty of folks who can out-shoot me, on demand, any day of the week. I mention this only to prove a point: XS Big Dot sights are *not* too big for you to use to shoot with accurately!



## Chapter 6

# Lasers In General

### *Accessory or necessity?*

I saw my first handgun-mounted laser in the mid-1990s. My former training officer, Don Ingram, and I were running combat-style pistol matches for my Fraternal Order of Police (FOP) Lodge. Early in my police career, Don was a big influence. He taught me a lot about officer survival. I remember sitting in the patrol car with Don, while he bombarded me with “What if?” scenarios. It made me think, and our discussions taught each of us how the other thought—this isn’t a bad thing to do with anyone you spend time with on an everyday basis.

At any rate, Don and I had scheduled a night match, and we had tried to devise a realistic scenario, at least with regards to the conditions you might have to shoot in at night. In those days, and to a large extent even today, combat pistol matches had stages that required an inordinate number of shots. It was more like putting competitors in a battlefield situation, as opposed to a realistic defensive scenario, but, when a shooter comes to a shooting match, they like to shoot and shoot a lot. So, you either incorporate a lot of shooting in one stage or create a bunch of stages. The police range we were working with limited the number of stages we could run, so we just ran one big stage.

For most of the matches we hosted, I tried to keep the stage scenarios realistic, with a focus on the shooter having to deal with conditions they might have to actually deal with in real life. Still, we always had the “gamers,” those looking for a way to beat the rules or system. One of those was a fellow named Gardisky.

Gardisky worked at a local gun shop and fancied himself a pistolsmith, claiming he could customize a 1911 like no other. At a previous match, I’d had to ask him to leave the line because the 1911 he had built went full-auto while he was shooting. At this night match, Gardisky showed up with a laser mounted to his handgun.

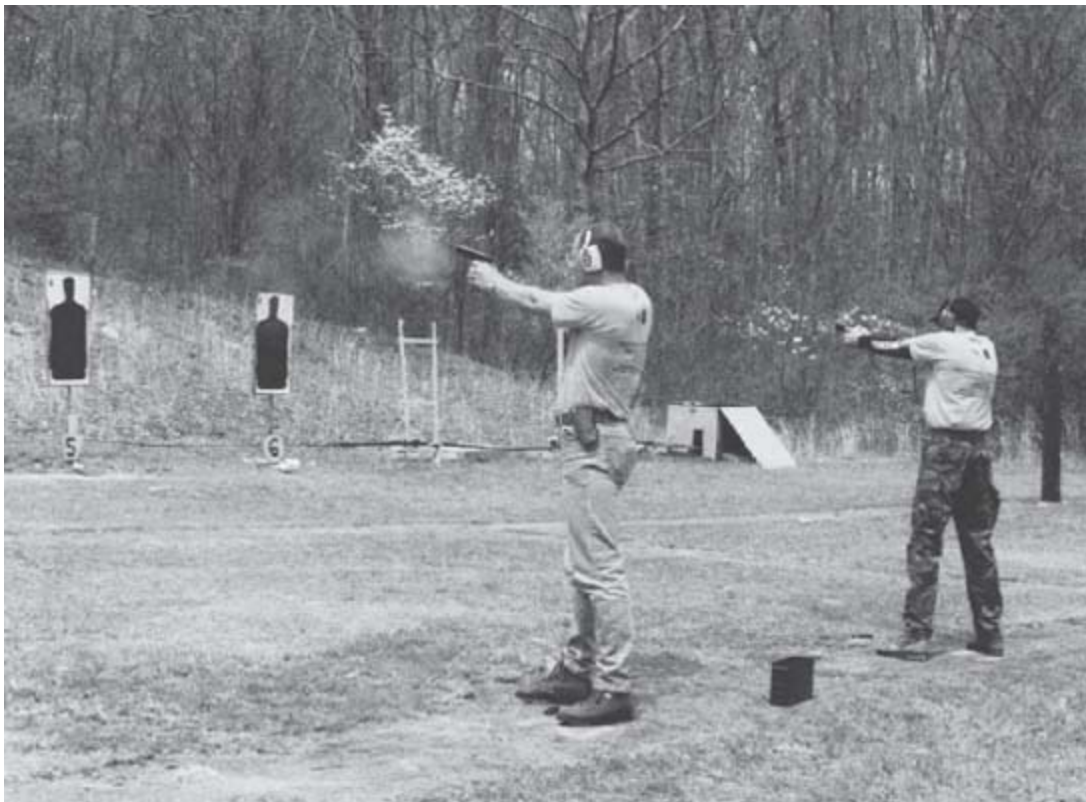
This was a clumsy-looking affair screwed to the underside of the frame under the barrel of a 1911. It had wires running back to the grip and, to me, it looked like the pistol was on some sort of life support system. While Gardisky was on deck to shoot, another competitor who was a decent shooter and a firearms savvy kind of guy, came to me and suggested that, while Gardisky was shooting, he would confuse him with a laser pointer he had with him by pointing it at the targets.

Now, admittedly, this was a very unsportsmanlike thing to do. However, none of the 40 or so folks shooting this match liked Gardisky at all. They were tired of his complaining and continual efforts to game the course of fire. I’ve always liked a good practical joke and gave the go-ahead for the confusion—but not just as a joke. You see, we already had blue lights going on a police car to confuse the shooters. This created a strobing, almost moving target effect for those using sights. We wanted realism, and I figured that, given the nature of the stage, a shooter equipped with a laser might have to

distinguish between his laser and that of another friendly in a situation like this. Yeah, I thought the interference with the laser pointer would be funny, but practical, too.

Yeah, I know, I was reaching for a justifiable excuse.

As a point of fact, it was both funny and practical. About three shots into the stage there were all of a sudden two lasers on the target. Sometimes, there was a laser on two different targets. The really funny thing was that, at one point, Gardisky's laser went out and he thought his point of aim was the red dot of the laser pointer, even though he was not in control of it and could not move it. At the end of the stage, his score was deplorable.



**It was at a match similar to this that I first saw a laser mounted to a handgun. I was not impressed.**

After I stopped laughing, I explained to Gardisky why we'd done what we'd done, that it was not unreasonable in a situation like this to expect your wing man to have a laser, too, and that you needed to be able to distinguish between your laser and the laser of your partner. I also apologized and offered to refund his entry fee and let him shoot again for free (which would have been a distinct advantage to him).

He did neither. He took his newfangled, laser-equipped handgun and went home to pout. And the upside was we didn't have to deal with Gardisky at our matches anymore. Did I feel guilty then? Nope. Do I now? Nope.

That incident turned me against lasers. Not because of the problem of two lasers on target, but because Gardisky's laser was state of the art for handguns at the time, a novelty piece of junk at best. It was another five years before I would give a handgun-mounted laser the attention it deserved.

Out in Oregon, Lou Danielson was of a different opinion. Lou, a shooter who was operating a high-tech tooling company, became interested in handgun lasers. Lou was smart enough to recognize what a laser had to offer shooters, and he decided to manufacture the best handgun-mounted laser money could buy. Lou and several others formed a company called Crimson Trace.

In 1994, Crimson Trace started offering a laser conversion for Glock handguns. It designed this laser to address all the things its inventor's didn't like about the handgun lasers currently available, namely it needed to have holster compatibility, had to be absent exposed wires, and had to include precision adjustments. It also needed to be reliable and, well, not ugly, and with minimal bulk. By

working with the available space inside the Glock's frame, Crimson Trace created a laser that mounted to the vertical portion of the trigger guard, with all the wires and the batteries internally housed.



**Gunfight veteran and former New York cop Jim Cirillo was an early proponent of lasers.**



**The first Crimson Trace handgun laser was custom fitted to a customer's Glock and was integral to the pistol.**

It was, literally, an ingenious creation. This conversion got people's attention. No longer did a handgun-mounted laser have to turn a handgun into the hunchback of Notre Dame. You simply sent your Glock to Crimson Trace, and one week later the company returned it with the integral laser conversion. Cost? \$595. Now, almost 20 years later, there are still about 1,400 of these Crimson Trace-converted Glocks in use and Crimson Trace still services those units.

About a year after the first Crimson Trace Glock laser introduction, the company introduced the laser grip. At that time, most handguns had grip panels, and it was the obvious choice for aftermarket laser attachment, particularly on steel-framed handguns. The first laser grips were for the Beretta 92, the 1911, and the Ruger Mark II. Cost? \$395.



**This is one of the original Crimson Trace laser grips. It was the first aftermarket, screw-on laser accessory that made good sense.**

As good as this was, handgun-mounted lasers were still slow to catch on. There were several reasons for this. Early on, lasers were advertised as the *alternative* to sights. Anyone in their right mind knows you don't ever trust your life to a battery without some sort of backup. On top of this, the early, externally mounted lasers were notorious for not holding zero, just plain not working, and sometimes even falling off the pistol. To an extent, handgun-mounted lasers were like early cell phones, cool but unreliable.

You also had the problem of the gun press, which was, at that time, dominated by writers who were, how can I put this in a nice way ... old fashioned. For them, you shot a handgun with sights,

and the only question was which sight was best. For the most part, these old-timers thought of lasers as gimmicks and, to be honest with you, the actual products *were* mostly gimmicks. It was the *concept* that had merit.



**It was the Crimson Trace laser grip for the Smith & Wesson J-Frame revolver that really got folks attention. After trying it, shooters really began to takes lasers seriously.**





**How much difference can a laser grip make on the S&W J-Frame revolver? This itty-bitty group was fired at 25 yards using the laser as a sight. There are some folks who can do this with the factory sights on a J-Frame, but you probably have enough fingers to count all of them.**

In 1997, things changed with Crimson Trace's introduction of the laser grip for the S&W J-Frame revolver. The J-Frame was (and is) a very popular handgun for personal protection, because of its small size. For the same reason, and for its reliability, it was also a popular backup gun for police officers. I carried a J-Frame on my ankle for about half my police career. As popular as it was, most found it hard to shoot with any precision. This was because of its almost non-existent sights and the gun's short sight radius. But now, all of a sudden, with the Crimson Trace laser grip, shooters *and* old

gun writers found they could actually hit stuff with a J-Frame—out as far as 100 yards!

The J-Frame laser grip quickly became a top seller for Crimson Trace, and it finally gave gun writers the confirmation they needed to finally start talking positively about handgun-mounted lasers. The rest, as they say, is history. Lasers for handguns have, today, become the hottest selling aftermarket accessory, and there is hardly a handgun for which you cannot purchase a laser.



**Before bringing out the SOLO, Kimber worked with Crimson Trace so that it could be offered with a laser grip.**



**The Crimson Trace Laser Guard offers a laser alternative for handguns that do not have interchangeable grips or for those who like custom or more classic grips on their pistols.**

In fact, firearms manufacturers are getting really smart and are now working directly with Crimson Trace so that, as soon as a new handgun is available, they know Crimson Trace will have a laser for it. The Kimber SOLO is a perfect example. Prior to introducing the SOLO, Kimber worked with Crimson Trace to develop a laser grip, and with Galco to develop a holster.

Crimson Trace, however, is not leading the handgun laser market because of the quality of their products—don't get me wrong, the company does offer high-quality stuff—but, more importantly, due to the instinctive/instant activation their products offer. With a Crimson Trace laser grip or Laser Guard, all you have to do to activate the laser is grip the handgun normally. A button, either integral to the grip or extending on an arm from the front of the

trigger guard (in the case of the Laser Guard) causes the laser to come on. You don't have to think about activating the laser, you just need to grip the handgun.



**For handguns like the S&W M&P, Crimson Trace offers a laser grip that replaces the pistol's backstrap.**



**Modern laser grips, like the Crimson Trace Master Series, are available in configurations other than rubber. Now, if you like wood grips, you can have them with a laser.**



**The LaserMax guide rod laser is unique in that it fits inside the pistol. I carried a Glock fitted with a LaserMax laser on duty for several years.**

This feature is, at this time, patent protected. So, with lasers from other manufacturers, you actually have to push a button that is not part of the normal grip. For instance, the LaserMax laser replaces the guide rod in a semi-automatic handgun, and to activate that laser you push on the takedown lever. This obviously necessitates the use of your support hand and, in an instance where your support hand might be injured or otherwise occupied, you'll not be able to turn on your laser. (If you have a long trigger finger you might be able to activate the LaserMax laser with it.)



**A rear sight with a laser inside it might sound cool, but it's not very practical.**







**Surefire's X400, light laser combo unit is a rugged, battle-ready device that offers instinctive activation.**

LaserLyte has a laser that is integral to the rear sight. This never seemed like a good idea to me, because it makes the rear sight overly large. Plus, to activate the laser, you have to push the button on the rear sight. This button-pushing exercise is not something you do during normal handgun presentation, and regardless what some tac-tard is capable of demonstrating on television, it is not an activity conducive to practical firearm applications.

The same is true with most of the non-Crimson Trace lasers that mount onto the rail just in front of the trigger guard on handguns. Somewhere on these devices there is a button that must be depressed in order to turn on the laser. Being able to do this during handgun presentation adds a new step to the process, and it's a step that cannot be smoothly and efficiently integrated into the draw stroke—with one exception. Surefire's X400 light/laser combo unit has an activation button on either side of the laser that can be operated by the non-shooting thumb, and there is also a button on an extension that projects back in front of the grip.





**Smith &Wesson's BODYGUARD pistol and revolver come from the factory with an integral laser.**

Lasers have become so popular on defensive handguns that several companies like Kimber and Colt's offer new handguns already equipped with Crimson Trace laser grips. A few years back, Smith & Wesson brought out two new handguns in its BODYGUARD line, both fitted with an integral laser right out of the box. The Smith & Wesson BODYGUARD handguns were a subcompact .380 semi-automatic and a compact .38 Special revolver. Integral to their construction was an Insight laser that was activated by a thumb button on the revolver and, on the pistol, a button forward of the trigger guard.

Aside from Crimson Trace laser grips, these are the two easiest to activate handgun lasers I've seen, but both still required a distinct and separate action to make the laser come on. The company called Insight makes trustworthy lasers, but without the Crimson Trace

instinctive/instant activation, they are less than ideal in a defensive situation. SIG sort of copied the laser setup on the Smith & Wesson BODYGUARD with its P290 in 9mm. But, again, it has another button that has to be pushed.

It might seem the preceding was bought and paid for by Crimson Trace. And, well, in a way it was. The company bought and paid for it with research, design, and testing and by being the only developer that offers handgun lasers that are instinctively and instantly activated when you grip your handgun. Until other companies become more innovative, or until the Crimson Trace patent expires, Crimson Trace's inventions will continue to be the best handgun laser options available. Period.

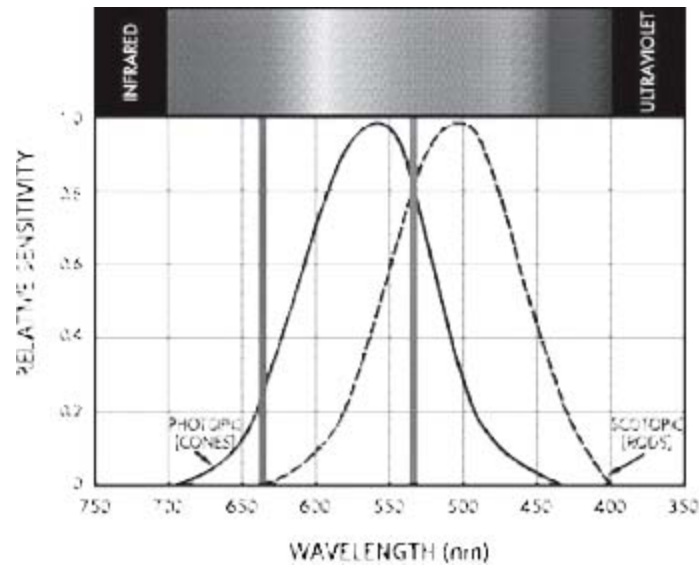
## Chapter 7

# How Lasers Work

*Technically speaking.*

**Y**ou may or may not care at all how a laser actually works. After all, it's just light, right? Well, yeah, but it's a pretty darn sophisticated light.

First, let's talk a little bit about light. Light has a wavelength, and humans can see light with wavelengths between 390 and 750 nanometers (nm). This is called "visible light," and it falls between infrared light, which has a very long wave length, and ultraviolet light which has a very short wavelength. Infrared light is commonly used to allow humans to see in the dark with night vision devices, and some birds and insects can see ultraviolet light. Ultraviolet light also causes fluorescent materials to glow. Remember your disco days?



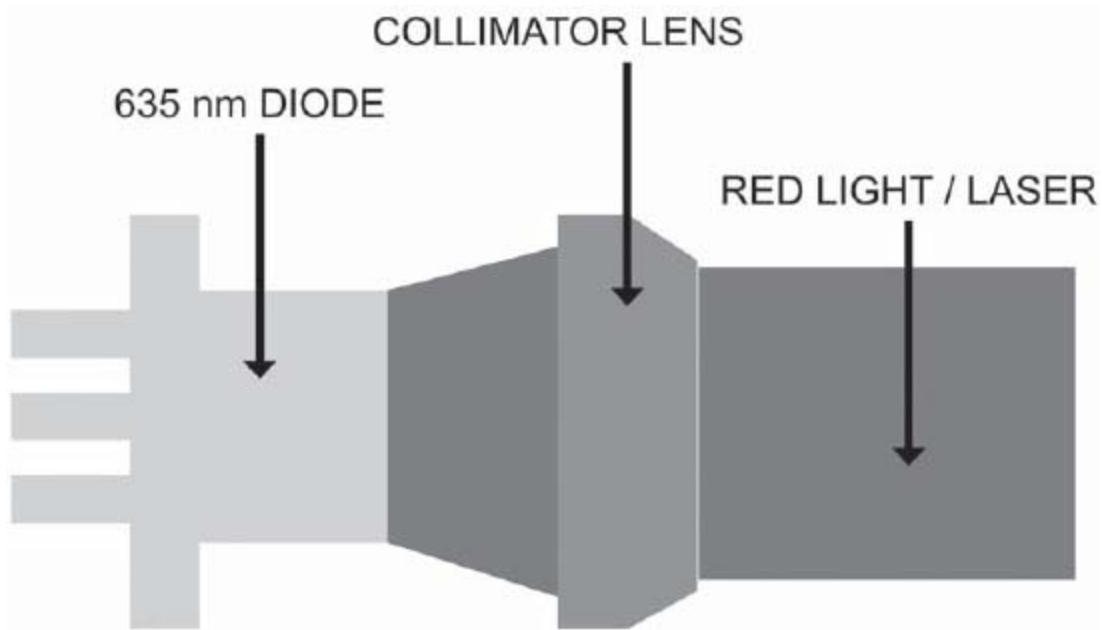
**Within the spectrum of light, humans can see light waves between those with an infrared and ultraviolet wavelength. Green light falls right in the middle of the visible light spectrum.**

Most handgun lasers generate light at a wavelength of 633nm, which, in the visible color spectrum, is red. Since lasers can be harmful to the human eye, their sale is regulated by direction from the American National Standards Institute (ANSI).

Lasers are broken down into classes based on the potential dangers they present. Handgun lasers are classed as 3A or 3R lasers. These lasers are considered safe if handled carefully, with restricted beam viewing. With a Class 3R laser, the maximum permissible exposure (MPE) can be exceeded, but with a low risk of injury. In hillbilly terms, this means if someone shines a 3R laser in your eye, your blink response will protect your eye from damage. Now, if you have been huffing gold paint or if someone holds your eye open while you are passed out, eye damage can result.

Visible continuous lasers in Class 3R are limited to a power level of 5mW ( $\frac{5}{1000}$  of a watt). So, from a power standpoint, all lasers are the same because of the 5mW limitation. However, that does not mean the laser beams of all lasers at 633nm and at 5mW are of the same quality. Why? Because for a laser to work, the light has to pass through a collimator lens, and the quality (read “price”) of this lens determines the quality of the beam.

Laser light is monochromatic, i.e., only one wavelength or color. Laser light is also coherent or organized, meaning each photon moves in step with the others. Laser light is very directional; lasers have a very tight beam that is very strong and concentrated. To make this happen, something known as “stimulated emission”—no, this isn’t a dirty phrase—is required. Essentially, a laser device propagates many, many photons of the same wavelength and phase. You push the activation button, and batteries power the device that, by controlling the light wavelengths, gives you a concentrated bright beam of a specific color.



## **Red laser module.**

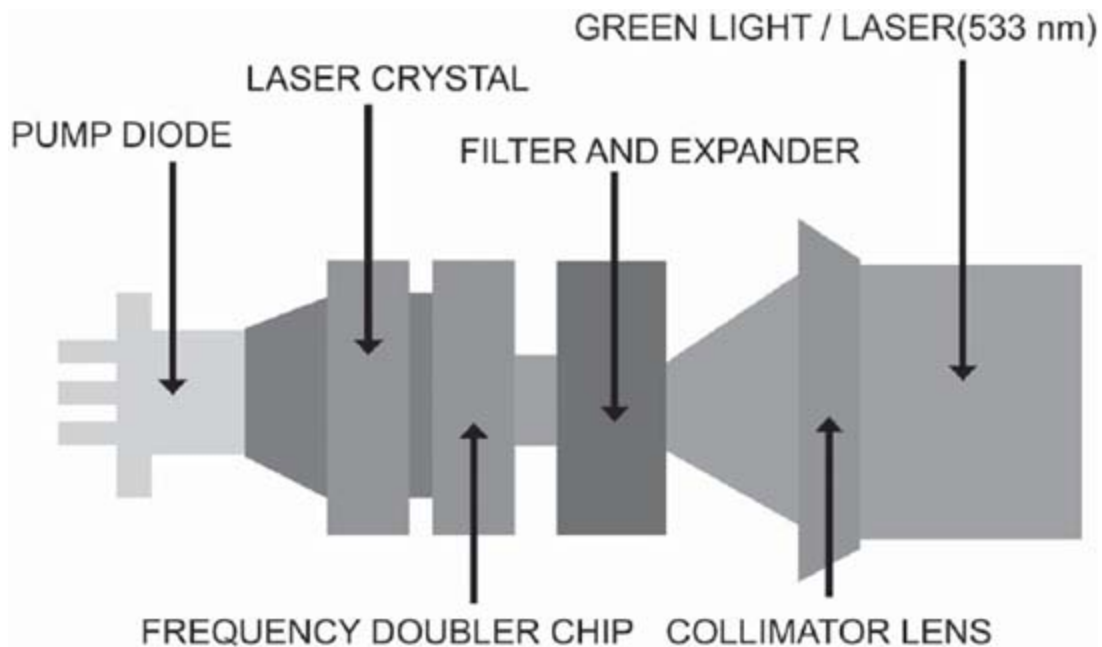
Red lasers at around 633 nm are relatively affordable to manufacture, because they are made up of a power source, a diode, and collimator lens. However, some are much more durable and more impervious to water than others. This is why a cheap laser pointer can be purchased for less than \$10, but a laser designed for a handgun can cost 20 to 30 times as much. They are both bright and both red, but if you drop the laser pointer, it will probably break.

Make sense? Maybe not, but laser physics is a complicated field full of smart folks who probably cannot start a lawnmower or change the oil in their car. All you really need to know as a gun owner is that the laser is safe, that it is bright enough, that it is rugged enough to be on a firearm, and that you can activate it in time to make it a viable tactical tool.

With firearm lasers, you have the choice between red and green. A good green laser will be more expensive, because it is more complicated to build. The human eye is more sensitive to green than red so, all things being equal, a green laser should always be easier to see. Of course, all things are never equal and some lasers are just brighter than others, even though they may be emitting the same wavelength of light. You see, the wavelength of the light emitted from laser is what controls the color, not the brightness or luminosity.

Here's a little lesson in light. Visible light waves are the only electromagnetic waves we can see. We see these waves as the colors of the rainbow. Each color has a different wavelength. Red has the longest wavelength and violet has the shortest. When all the waves

are seen together, they make white light. When white light shines through a prism, the white light is broken apart into the colors of the visible light spectrum. Water vapor in the atmosphere can also break apart wavelengths, creating a rainbow.



### **Green laser module.**

As I stated before, the typical human eye will respond to wavelengths from about 390 to 750nm. A light-adapted eye generally has its maximum sensitivity around 555nm, which is in the green region of the optical spectrum. For comparison sake, ultraviolet light is below 390nm and infrared light is above 750nm. The human eye can see neither of these light waves.

This would seem to suggest that a green laser would be easier to see than a red laser. Problem is, regardless of color, lasers have different brightness and luminosity levels. All things being equal, a green laser will be easier to see than a red laser, but if you compare

a red laser with high luminosity and brightness to a green laser with low luminosity and brightness, the red laser will be easier to see.

The simplest way to select a laser, if your main concern is how visible the laser will be, is to compare lasers side by side. Forget all the nanometers and wavelengths. Just use your eyes and pick the laser you can see the easiest in the most varied light conditions and on the most varied backgrounds.

One last note on the color issue. If you expect you might have to work as part of a team, like as a husband and wife, different colored lasers make sense. Short of team members having a different color laser, one could opt for a laser that strobes as opposed to casting a constant beam. Outside these considerations, color and beam style are personal preference.

## **Types of Lasers**

There are a variety of laser housings and mounting options for handguns. Some replace the handgun's grips or attach to another area of the frame. Others replace the guide rod on semi-automatic handguns, some attach to an accessory rail on either revolvers or pistols, and some are integrated into a replacement rear sight. Let's take a look at some of these.

A clamp-on design is a simple affair that sandwiches the laser and the barrel between two pieces of formed steel or polymer. They are primarily used on shotguns for mounting the laser or laser/light combo to the magazine tube, though some applications for handguns are available. Clamp-on lasers offer the least resistance to shock or impact and are usually activated by a button on the



tailpiece of the laser, or by a pressure pad that connects to the laser via a wire.

Rail or trigger guard mounts have a grooved receptacle that either engages a Picatinny military spec rail, or clamps around the trigger guard. These rails are generally integral to the under-barrel dust cover on handguns. Most rail-mounted lasers are more resistant to shock and impact than clamp-style lasers. These lasers are most often controlled by a switch on the rear of the laser housing, but some can have a remote pressure switch connected to the laser via a wire.

Frame lasers are popular on sub-compact polymer handguns and usually mount forward of the trigger guard. This type laser is cosmetically similar to a rail laser, and appearance suggests they are almost as rugged with regards to resisting impact. Most are activated by a remote pressure switch that's integral to the framework of the laser assembly, and most, as with rail- and trigger guard-mounted lasers, will require a specialty holster.

Grip lasers simply replace or cover a handgun's grip. They are rugged because they do not protrude from the firearm. This reduces the chance that laser alignment might be compromised during an impact. Grip lasers are activated via a button or pressure switch on the grip itself, and so guns equipped thusly do not require a specialty holster.

Guide rod lasers replace the factory guide rod inside semi-automatic handguns. They are the least obtrusive of all lasers, because they are completely contained inside the handgun. Guide rod lasers are activated via a switch on the exterior of the handgun, usually one that replaces the takedown lever. Guide rod lasers do

not require a specialty holster, but do not offer precise point of aim adjustment.

Another method of attaching a laser to a handgun is by replacing the handgun's rear sight with a sight that has an integral laser. These are ultra compact lasers and, in most cases, will not interfere with the holster. Because a sight laser replaces the handgun's rear sight, it compromises the opportunity to modify the primary sight of the handgun with a tritium or any other type sight.

## **Head-to-Head Comparison**

To get an idea of how various lasers compare, I fitted a Glock Model 22 with multiple lasers and subjected the gun and lasers to a variety of tests. In all there were four tests conducted in order to evaluate installation, adjustment, serviceability, durability, and water resistance. As was plausibly feasible, the tests conducted were as objective as possible. Each laser evaluated and each test category is summarized as follows next.



### **Crimson Trace LG 617 Laser Grip.**

**1. Crimson Trace Grip LG 617:** By attaching over the rear of the Glock grip, this laser did not interfere with holstering. It has a pressure switch centered in the rear of the grip and activates with no other action than just gripping the handgun. The grip is form fitted and pinned in place with the pin in the rear of the Glock's grip frame. This is a Class 3R red laser that operates at a wavelength of 633nm at 5mW on two CR2032 or DL2032 lithium cell batteries.



**Crimson Trace LG 617 Laser Grip.**

**2. Viridian C5L:** A light/laser combo unit that will attach directly to a Picatinny rail on a carbine or the under-rail on a handgun. The unit has a multitude of programming features to set laser and light operation to include pulse and constant-on. This 100-lumen LED light/532nm wavelength Class 3A green laser operates at less than 5mW and runs off one CR2 lithium battery. Operation is conducted via a large pressure switch on either side of the unit.



**Viridian C5L.**



**Viridian C5L.**

**3. InSight X2L:** A light/laser combo unit powered by one CR2 lithium battery. The LED light has a maximum output of 40 lumens and the red laser works at a wavelength of 640 (+/-) 40nm at 5mW. This Class 3A laser will attach to a Picatinny rail or the under-rail of a handgun. It is operated by a toggle switch from either side of the unit.



**InSight X2L.**



### **InSight X2L.**

**4. LaserMax Guide Rod Laser LMS 1141P:** This pulsating red laser replaces the factory guide rod inside the handgun. It operates off three alkaline 393 batteries at a wavelength between 600 and 700nm at less than 5mW. A new slide lock is provided with the laser. By pushing this slide lock from left to right or right to left, the laser is activated.



### **LaserMax 1141P.**

**5. LaserMax Rail Mount LMS-UNI-G:** This is a pulsating green Class 3R laser, operating with a 532nm wavelength at less than 5mW. It is powered by two 1/3 N alkaline batteries and can be attached to the under-rail on a handgun or to a Picatinny rail. The activation switch is a sliding pad that can be pushed from left to right or right to left.





**LaserMax LMS-UNI-G.**

**6. LaserLyte Rear Sight Laser RL-1:** This red laser replaces the rear sight on the handgun. It has a small recessed button on the left rear of the sight for activation. It can be pushed once for constant-on and twice for pulse. The unit is powered by four 377 alkaline batteries.



**Integral laser/rear sight**



**LaserLyte Laser Sight**

## **The Test Protocol & Comments**

- **Test 1—Installation:** Each laser was installed on a Glock Model 22 following the manufacturer's instructions. Lasers that took less than five minutes to install received one star. Lasers that took longer than five minutes to install received no stars. With the exception of the LaserLyte laser, which replaced the rear sight on the Glock handgun, all the lasers were easy to install. The LaserLyte rear sight was installed by a gunsmith, who charged for the service.

- **Test 2—Adjustment and Maintenance:** Following the manufacturer's instructions, each laser was adjusted to point to the same point on a target as the handgun sights at a distance of 21 feet. Lasers that could be adjusted in less than five minutes received one star. If it took more than five minutes to adjust the laser, no stars were awarded. The batteries were changed on each laser following the manufacturer's instructions. If it took less than five minutes to

change the batteries, the laser received one star. Batteries that took longer than five minutes to change received no stars.

All laser sights with the exception of the LaserMax Guide Rod sight could be adjusted for point of aim with small hex-head wrenches. This was easy to accomplish with each of the laser sights, and all were capable of being adjusted to coincide with the point of impact. The LaserLyte sight installed on the Glock handgun by the gunsmith required zeroing of the fixed sight and the laser. The fixed sight had to be physically driven to one side, but, after that was accomplished, the laser was easy to adjust. Battery installation was just as easy on all the lasers tested.

- **Test 3—Serviceability:** If laser installation resulted in the handgun not functioning with standard holsters, it received no stars. If the handgun would fit standard holsters after laser installation, it received three stars.

It is imperative that a handgun to be carried concealed fits in a holster. Inexpensive and oversized pouch holsters of nylon webbing are available to fit most handguns with an under-rail laser, but, for this test, the handgun had to fit a form-fitted holster designed for that handgun in its unmodified factory condition. This resulted in a poor rating for all the lasers that required attachment to the under-rail of the handgun. This is not to say quality holsters are not available for lasers attaching to an under-rail, but, without a doubt, any laser that attaches to the under-rail of a handgun will limit holster selection.

- **Test 4—Durability and Water Resistance:** Each firearm was fired 50 times with the laser attached, and a 1.5-pound rubber weight was dropped from a height of three feet, three times onto each laser

while attached to the firearm. Lasers continuing to work and that did not show a shift in point of aim of more than one inch at 21 feet were awarded two stars. Lasers that showed a shift in point of impact greater than one inch or that failed to work after the test received no stars. Each laser was also submerged to a depth of six inches into 70-degree water for 10 seconds. Lasers were tested immediately upon removal, five minutes after removal, and 24 hours after removal. Lasers were awarded one star for passing the test at each time period. If the laser failed to come on or the beam was not sharp and bright at 21 feet, the laser failed the test at that time limit.

The purpose of this test was to see how hard it would be to break a laser sight, determine if it was easy to alter a laser sight's point of aim by impact, and check each sight's resistance to moisture. It's highly unlikely you will be required to use a laser sight under water, but you could be required to use one in the rain and you might accidentally drop one in a mud hole. All the laser sights, with the exception of the LaserLyte rear sight laser, survived the impact test. The LaserLyte rear sight laser's point of aim was altered more than two inches at 21 feet.

The water test was a bit more interesting. All the laser sights were functional after 24 hours. The water only negatively impacted one of the lasers; upon removal from water, the Insight Laser cast a distorted beam. This was due to the collection of a water droplet over the lens of the laser. Wiping this water droplet away corrected the problem.



**A handgun laser needs to be easy to install, zero, and serviceable. These are things to consider when selecting a laser for your defensive handgun.**

Overall, it would seem that those building laser sights for firearms are, generally speaking, making good products that are rugged, easy to install, and easy to adjust. Obviously, personal preference, hand size, and the way you intend to use a laser sight will play a part in your selection.

TEST RESULTS					
	TEST	TEST	TEST	TEST	TOTAL
LASER	1	2	3	4	STARS
Crimson Trace LG 617	★	★★	★★★	★★★★★	11
InSight X2L	★	★★	—	★★★★	7
LaserMax LMS 1141P	★	★★	★★★	★★★★	10
LaserMax LMS-UNI-G	★	★★	—	★★★★★	8
LaserLyte Sight Laser RL-1	—	★★★	★★★★★		8
Viridian C5L	★	★★	—	★★★★★	8

The next test was centered on the speed at which a laser could be activated and how well and fast a variety of shooters could use that laser to get hits. After all, that's what we want lasers to do, help us hit fast and accurately. This may be the most critical aspect of laser performance. If a laser is slow to activate, it could delay the delivery of an accurate shot. As might be expected, the performance of each laser varied a great deal from shooter to shooter. The averages should represent a general suggestion of how intuitive the activation of each laser is by a broad range of shooters.

Not unsurprisingly, with the Glock handgun, the open sights turned in the fastest average time. Only one shooter managed to record an average engagement time with a laser faster than his average engagement time with the open sights, and this was accomplished with the Crimson Trace grip laser. For all other shooters, this same laser was the next fastest behind the open sights, with regard to average engagement times.

This can be partially explained by the fact that, of all the shooters tested, only one had any real experience shooting a laser-equipped handgun. The other four shooters have all been relying on open sights throughout their shooting careers. Are lasers faster than open

sights? My experience has shown, given a handgun with a laser already activated and after about 15 minutes of practice, most shooters are, in fact, able to achieve hits faster.

Obviously, based on the results of this test, the Crimson Trace laser grips were the fastest to activate of any of the laser sights. And, on average, they were only  $\frac{7}{100}$  of a second slower than open sights. The next fastest laser was the InSight X2L and it was almost a full second slower (on average) than open sights.



These average times were obviously dependent on the skills, ability, and experience of the shooters in the test. Given there was such a broad range of these assets, it could reasonably be deducted that these averages are a good representation of the natural



instinctive activation of each laser sight, given a shooter who is not familiar with engaging targets.

SIGHT	SLOWEST	FASTEST	AVERAGE
Open Sights	2.63	1.43	2.08
Crimson Trace LG 617	3.27	1.34	2.15
InSight X2L	3.88	1.88	2.91
LaserMax LMS 1141P	8.03	1.41	3.87
LaserMax LMS-UNI-G	7.17	1.76	3.00
LaserLyte Sight Laser RL-1	6.56	2.59	4.31
Viridian C5L	5.73	1.75	3.05

*NOTE: The data above lists the slowest and fastest individual times for each laser tested. The times listed under the average column represent the average time of all five shooters who participated in the test.*

## Chapter 8

# The Laser's Edge

*“The world is full of obvious things which nobody by any chance ever observes.” —Sherlock Holmes, The Hound Of Baskervilles*

**E**arly on, I think most everyone, including me, thought of lasers as a replacement for sights. That concept of the laser sight was what I resisted. Now that I have experience with them, at work and at play, I can admit I may have initially overlooked the obvious. They are *not* a replacement for sights. In short, I was wrong.

When I decided to get serious about lasers, my first impulse was to find out if I could shoot as accurately with a laser as I could with open sights. I conducted several drills, some timed and others at my own pace, from as close as 10 yards and as far away as 50. I found there was no discernible difference in group size between the two sight systems on what was, at that time, my issue Glock Model 23. However, I was able to shoot tighter groups with a Crimson Trace Laser Grip-equipped snubnose revolver.

I also discovered that, if you want to shoot from the hip, the laser offered the shooter who is unpracticed in this art a much higher level of speed and accuracy. And, at the risk of stating the obvious, I will add that, in the dark or low light, the laser performed better than tritium night sights.

As I looked for other tangible, on-target ways to compare sights and lasers I realized, like Holmes said, I was overlooking the obvious. It's not a sights versus lasers question. So I'll leave the description of my shoot-out, if you want to call it that, confined to the above summary. What really needed investigation was if a laser offered any benefit to the shooter and what, if any, were its detractors. In short, do they work, how can they be used to the shooter's advantage, and are they worth the money?

My first important discovery was that the laser was a tremendous aid to dry-fire practice. Picking a spot on the wall or target with an (for damn sure) unloaded gun, it was an enlightening experience to watch the little red dot wobble through the trigger pull. Granted, you can do the same with open sights, but slight movements are not nearly so obvious to the eye.



I also found that, while watching other shooters live-fire, I could watch the laser beam on target and see exactly what they were doing with their handgun during trigger pull and while trying to recover from recoil.

Two additional observations need mention here. If you're working through dry-fire practice with a laser, the laser beam should be adjusted so it appears on target about two inches above your point

of aim. Aim with the sights, but watch the laser with your peripheral vision. If you jerk the trigger, the laser will jerk and you will see it. If you are conducting live-fire drills and are having someone coach or watch you, adjust the laser so that it appears on the target below the point you are aiming at with the sights. This way you can concentrate on the sights while your coach watches the laser.

Furthermore, you can dry-fire practice with the laser as the primary sight. Point it at the target and work through the trigger press while not allowing the laser to move. Alternately, you can move the handgun (laser) on the target until it crosses the desired point of aim and pull the trigger at that point, hopefully without making the laser jerk. This is a very good way to learn your handgun's trigger.

When you are considering the time it takes to deploy a handgun from the holster, you may question the speed with which a laser-equipped shooter can turn his laser on before engaging the target. This topic was addressed in the last chapter, and it should be obvious the instinctive activation offered by the Crimson Trace laser grips and Laser Guard are the fastest. But let me add something else here that is often overlooked when it comes to laser-equipped handguns: learning the draw stroke.

Many find it difficult to master getting a handgun out of the holster and orientated towards the target smoothly and efficiently. By watching the laser beam as you draw—with the Crimson Trace products, the laser is activated as soon as you establish your shooting grip around the gun in the holster—you can track muzzle orientation without watching what your hand is doing.

Just the same, new shooters often wonder what makes a good shooting grip. With the Crimson Trace laser grip, it's hard to activate the laser with a bad shooting grip. For most folks, if your grip is activating the laser, then it is a good shooting grip.

So, if the only real advantage of the laser is dry-fire practice and a bit faster and more accurate hip shooting, why spend your money on one? If you have never pulled a gun on someone or held someone at gunpoint, it may be a little hard to understand.

Cops routinely have to take suspects into custody at gunpoint but never pull a trigger. Sometimes these arrests or otherwise serious situations occur in crowds and in the presence of more than one suspect or possible assailant. This type of scenario is very difficult to replicate with any training other than with the use of Simunition (aka high-tech paintball ammunition). The officer must stay focused on the subject he is pointing the pistol at and, at the same time, be cognizant of any other threats that may arise near him and from a variety of directions. The laser allows the officer to do so without any concentration on the sights and makes it much easier for him to be aware of what is developing around him. (RULE No. 8)

Not only that, when you point a handgun at someone and line up the sights for a center mass shot, the handgun covers your view of their danger area, their hands and their waistband where weapons are commonly carried. With a laser sight, you can move your handgun to a high ready, low ready, or even the retention (close ready) position so that you can see your entire assailant and still know—by looking at the red dot on their chest—you have a center mass point of aim.

To further illustrate how important this is, take your carry gun and point it at arm's length in a safe direction while lining up the sights on a point of aim. Now, stand there and hold this position and point of aim for 15 minutes. I bet you can't do it, because your arms will get too tired. Why would you hold a gun on someone for 15 minutes? Well, it may be 15 minutes before the police arrive. With a laser-sighted handgun, you can hold a bad guy at gunpoint until the cows come home. Just drop your arm to your waist and rest your elbow there.

This is significant, because it allows you to keep the weapon close to your body, where you have much more control over it and can secure it more easily. If the troll in your sights decides he wants your gun, or if you are assaulted from another direction by a zombie, vampire, or werewolf, close to your body is where your handgun should be. The beauty of the laser is that if you don't want to, you do not even have to turn it on until you are in the "at gun point" situation.

Are lasers really bright enough to see in any light? Yes and no. In the brightest light, a laser can be hard to see on some surfaces as close as three yards. At night, it's not uncommon to be able to see a laser on target as far as 200 yards away. In common indoor and outdoor lighting, you should always be able to see your laser at least out to around 15 yards; on an overcast day much farther. But here's the thing. If at any time you point your handgun and cannot see the laser—day or night, bad guy or target—revert to your handgun's sights immediately!

Some postulate that, when a bad guy sees the little red dot on their chest, they will instantly surrender. Testimonials expressing

this phenomenon abound. I've also heard it said the sound of a pump shotgun chambering a round will make even the most venomous fiend run for the woods. I've no faith in either theory, but don't doubt it can happen. I'll also submit that, under certain conditions, an active laser may disclose your position. The prudent gunfighter will keep the laser off or concealed until he is ready for the enemy to know where he is. With the Crimson Trace laser grip, you can easily conceal the laser beam with your trigger finger (if you are right-handed).

There is one other viable reason I discovered a person may consider a laser sight, and it goes against the statement I offered at the outset about a laser not being a replacement for fixed sights. Age brings with it bad knees, discounts at McDonald's and, worst of all, bad eyesight for many. I know several police officers nearing retirement who struggle to see their front sights. I'm no different, and front sights are foggy for me. For us, the laser can be a true savior, allowing continued recreational shooting pleasure and personal protection without resorting to a scattergun.





The ability to shoot accurately at night or from the hip, to be able to hold a gangbanger at gunpoint until the cavalry arrives, and to be able to enhance your training are all good reasons for a laser on a handgun. But they may not be the best reasons. A life and death encounter is a dynamic, chaotic situation, one that will likely require you to do things you never expected you might have to do and, very likely, have never done before. Two of these are shooting while you are moving, and shooting from unconventional positions.

Shooting on the move is a difficult thing to do accurately. It challenges the secret—sight alignment and trigger control—because your platform is no longer stable. Not all of us are Todd Jarrett; we do not live and breathe the handgun, we do not practice every day. A handgun fitted with a laser sight allows us normal shooters to focus on the target and forget front and rear sights. It lets us move with the handgun held in any position we want so that we can, with

our peripheral vision, see where we're going while we are looking at the threat.



I could attempt to wax on and off about how well a laser will improve your ability to shoot when on the move, but I cannot do it justice. It turns a kiss you're not sure is wanted on the other end into one you know your partner is longing for. You have to experience it to appreciate it.

The same can be said for shooting from freaky positions like you might have to in a life and death situation. You might get knocked to your back, might have to shoot out of your car window to your weak side, hell, you might need to shoot behind you. We cannot predict what you will have to do, but we know that, with a laser-

equipped handgun, all you will have to do is get the light on the target and pull the trigger.

By now you should be convinced a laser can be an asset to your survival. At the risk of sounding like a Crimson Trace commercial, the addition of Crimson Trace laser grips to your handgun has no negative impact on your ability to use that gun. After all, they all have a master switch that turns them off completely. Like the tire tool in your car trunk, it is there when you need it, and there are many plausible instances when you just might.

## **Training Lasers**

Can lasers truly impact training in a positive manner? Several methods have already been addressed, but in what other ways can they be an asset?

Shooting is part of my job. I shoot some sort of firearm almost every day. On days I don't shoot, I dry-fire practice, because it helps me stay sharp. But dry-fire practice kind of sucks. There's no bang, no recoil, and no hole in the target. It's sort of mind-numbing, because there's not much feedback. Kinda like an expensive dinner, boring conversation, and no loving at the end. Still, ask any professional shooter and they'll tell you dry-fire practice is part of their routine.



**Next Level Training offers a unique and dedicated laser training handgun. It can be operated as a constant-on laser or as a laser that blinks when you pull the trigger. It is a great tool for learning the secret.**

Incorporating a constant-on laser is a way to get more feedback, because you can watch your handgun's orientation in relation to your point of aim through trigger manipulation. Laser/dry-fire practice training like this can be accomplished with any laser sight. However, according to some trainers, it's not "tactically intelligent" training. They contend you watch the laser instead of the sights. This is kind of like saying you should not practice on paper targets because they don't scream or fall down when hit. For advanced shooters, maybe they have a point, but I still find myself occasionally using a constant-on laser to aid work with my trigger pull.

Laser training devices that flash when the hammer falls are an alternative. They fit inside the handgun barrel. Even though you can see the laser flash with your peripheral vision, it still pulls your focus from the sights when you should be concentrating on follow through. I think they can still be viable tools, even for advanced tacticians, and I use them frequently when working on fast weapon presentation at close range. All constant-on handgun lasers are great at confirming weapon orientation during the draw stroke (or at any time for that matter).



**With the LaserLyte Laser Target, you can actually see your shot group by shooting the display button after several laser shots at the target. You reset the unit by shooting the reset button.**

Combining a laser training device with LaserLyte's Laser Target seemed to be a great tool to me, especially for mastering the secret, because the target records the impact or flash of the laser for later review. I wanted to find out if, in fact, working with a laser as a

training tool could noticeably improve a novice shooter's basic marksmanship skills so I conducted an experiment.

Bat, my son who was 11 at the time of my experiment, has been shooting since he was four. He understands the secret, but is still trying to master it. My wife, Drema, also became more interested in being able to provide for her own protection and security for our kids. I urged her to go to Gunsite, but she wanted some pre-instruction so she wouldn't feel like she was a greenhorn when she got to Arizona. They seemed like perfect research specimens.

I had them both fire three, five-shot groups at three different targets at a distance of seven yards to establish their average group size. For the next five days, they were required to work on the LaserLyte Laser Target using the same handgun and a laser training device.

Both worked with their handguns beyond the mandated 25 trigger pulls for each evening's session. Bat went so far as to conduct his own test, shooting from various positions like he was some sort of covert commando. They actually had fun and appreciated the feedback from the LaserLyte Laser Target.

Five days later, we stepped back out to our Shadowland range. They fired three more five-shot groups. Bat's average group size shrunk by 12 percent, Drema's by 44 percent! Ironically, their initial average group sizes had been identical. Bat demanded another try. After another week of more serious practice using the same minimum, 25 trigger pulls per day routine, he was able to reduce his groups to an average size of 5.08 inches, a 31 percent decrease from his initial attempt.



**By combining a LaserLyte Target and one of their laser trainers, you can practice the secret anytime and anywhere and never hear anything but a click.**



**After five days of working with a laser trainer, the author's wife, Drema, improved her marksmanship by 44 percent—and she never fired a live round!**







**With the Laser Ammo SureStrike, you will never wonder if your handgun is unloaded, since the unit is inserted in a handgun's chamber, rendering that gun incapable of chambering a live round.**

This experiment reminds me of something Grandpa used to say to us kids: "If you don't know how to shoot, there's no use buying ammunition, 'cause you're just gonna waste it." A laser training device can help you learn the secret without wasting a single round.

A LaserLyte Laser Target and laser trainer will set you back less than the cost of 1,000 rounds of ammunition. The difference is you can practice almost anywhere at almost any time and shoot as much as you want, with no noise, recoil, and muzzle blast distraction.

## **Fighting Lasers**

What should you consider when selecting a laser for a fighting handgun? Let's try to break this down to the nuts and bolts. It needs to be reliable, and we've seen that most are. It also needs to be compatible with how you are going to use it. If you are going to carry concealed, it needs to work with a holster, and the holster needs to be one you can wear comfortably. It also needs to have instant/instinctive activation. In other words, you should be able to activate it by doing nothing more than establishing a shooting grip on your handgun. Beyond that, anything else is mostly personal preference.

There is something else to consider. We briefly looked at how a laser should be sighted in when conducting basic dry- and live-fire skills practice, depending on the type of practice you're doing. How should it be sighted in if you are conducting more practical live-fire training or when it's being carried on the handgun for personal protection?

For starters, when conducting practical/tactical-type training drills, the laser should be sighted in just as it will when you are carrying it. Opinions vary with regard to where this sight-in is, so let's look at the options and discuss the pros and cons of each. But first, a word or two about laser offset.

Laser offset addresses the fact that the view of the laser on target and the impact of the bullet fired can only exactly coincide at one range. Since the laser is mounted either below, to the side, or both, with regards to the barrel, this point of convergence of the bullet and the laser dot on the target can only be adjusted to coincide at one distance.

What is the best range to establish this crossing of the bullet's path and the laser's beam? It's really not that big a deal inside, say, 20 yards, unless the distance between the center of the bore and the launch point of the laser are drastically different. If you adjust the bullet impact and laser to coincide at, say, 20 yards, there might be an inch or so difference at 10 yards. The key is to work the coincidence at the longest range possible. This limits the diversion at closer ranges.

The problem is few of us can shoot a good enough group at 50 yards to allow precise laser adjustment. I typically adjust lasers on defensive handguns so they will be in line with my point of impact between 10 and 15 yards. This will generally put the laser to within an inch or so of my bullet impact all the way out to about 25 yards.

## **Laser Sighting-In Methods**

**1. Sighted Below Iron Sights**—Most who are unfamiliar with lasers and how they can enhance your ability to hit a target often suggest you sight the laser in so that it cannot be seen if you are using the sights. In other words, the laser is sighted at a point just below the sights. Their thinking is you should look for the sights first and only transition to the laser if you cannot see the sights.

I understand their logic; they don't want you looking for a laser that may not have come on or that might not be very visible for whatever reason. That could slow down your shooting. For those who intend to only use a laser as a backup to iron sights, this would seem to make sense, but, if you are conditioned to always look over the sights, how will you see the laser without having to take the time to look for it?

**2. Sighted on Top of the Front Sight**—This is the most common method for sighting in a handgun laser. The laser is adjusted so that it appears right at the top of the front sight on the target. In other words you are kind of capping your front sight with the laser beam. If you subscribe to the six o'clock hold method, this means the laser should indicate the exact point of impact of the bullet at one precise distance.



To me, this makes more sense than hiding the laser behind the front sight. At least this way, if your handgun presentation is smooth and you are good at orienting the pistol towards the target, the laser should always be visible. The problem is this isn't always the case. Even just a slight cant to the handgun, one that still seems to produce a good sight picture, will hide the laser behind the front sight.

**3. Sighted Above the Front Sight**—This method guarantees the laser will always be visible. If you present the handgun towards the

target and orient it correctly, you should always be able to see the laser just above the front sight. This way, if the sights aren't visible, the laser should be and without any head moving or gun canting. It also means you might see a flash sight picture with the laser before you see a flash sight picture with the sights. This is much more likely to occur in a chaotic scenario than when on the range, because, in a life or death situation, you are more likely to be working off of target focus.

Think about it this way. You are focusing on the target and presenting the handgun towards the threat. About the time your arms are 60-percent extended, you should be looking for the front sight so you can shift focus or at least obtain a flash sight picture. However, if you are presenting your handgun as you should, it should be oriented at the target long before your arms are 60-percent extended, and with a target focus and supporting light conditions, you should see the laser dot on the target before you could pick up a flash sight picture. Now all you have to do is refine the laser (sight) alignment as you extend your arms and shoot.

## Chapter 9

# Red Dot Sights

*Breath deep and you can smell the future.*

**W**hat is a red dot sight? A red dot sight is an optical sight, in that it has a glass lens you look through. However, red dot sights for handguns provide no magnification. As modern as a red dot sight on a handgun might sound, they are nothing new. For many years, speed shooting competitors have used red dot sights in competitions. Why? Because they are the best and fastest way to engage a target with a handgun in most any situation.



**Modern red dot sights like this Leupold Delta-Point are unbelievably compact and light.**

If that's the case, then why are red dot sights not standard on defensive handguns? It's simple really. Until just recently, red dot sights have been too big for practical application on a defensive handgun. They also obscure the open sights, and this is never a good idea, because, if your red dot sight breaks or if the battery dies, you will not be able to accurately engage the threat. Sure, you could also fit a laser to the handgun and default to the laser if the red dot sight pukes, but that means something else to think about, another button to push, and that's the last thing you want when facing a lethal threat.

I like technology and I have an iPhone, so don't get me wrong, I'll use anything that tips the odds in my favor. However, if I am going to *rely* on an electronic device to save my life, then I'm not going to have another electronic device as a backup. If I have to go to a different sight, I want to go to a sight I know will be there, no matter what.

Times, however, are a changing. Modern red dot sights like the Leupold Delta-Point, Trijicon RMR, and the L3 Insight MRDS are incredibly small and just as rugged. They weigh an ounce or less with a battery installed. Our military has adopted these sights, and they are reliable. Believe it or not, these sights have a run time as long as a year.









**Regardless the target color or light in Situation images 1,2 and 3 (here and on the following page), you will be able to see the reticle of a red dot sight on the target.**

These modern red dot sights are also parallax free. This means that you don't have to have your head directly behind the sight for them to point to the place the bullet will strike; if you're looking through the sight and the dot or chevron reticle is not exactly centered, it does not matter. Put the dot on the spot you want to shoot and pull the trigger.

Until you've fired a handgun with a red dot sight, don't knock it. You have to experience it to believe how fast they are and how much they can improve your shooting. As it is with a laser, red dot sights allow you to maintain a target focus and keep both eyes open. You won't have to line up a rear sight with a front sight and then line those up with the spot you want to shoot. Hands down, a handgun red dot sight is the most intuitive and best sight system available.

So, again, the question that begs asking is why aren't all defensive handguns—especially those used by law enforcement and the military—equipped with red dot sights? There are three primary reasons: cost, interference with open sights, and resistance to change. Let's look at each of these separately to better understand the reason the red dot sight is the redheaded stepchild.

You can purchase a reliable defensive handgun for less money than you can purchase a compact and reliable red dot sight. Even if you do put down the cash for both, you will still have to get a gunsmith to mount the red dot sight to your handgun. Oh, and, you're also going to have to modify your current holster or have a special one made. Most shooters do not believe the red dot sight will offer an advantage worth the expense.

Red dot sight installation usually necessitates removal of the handgun's rear sight. This means that, if your red dot sight gives up the ghost or gets broken during a fight, you have no way to accurately engage the target. We mentioned combining a laser with a red dot sight, but lasers can break, too, and they are not visible in all situations. Just the same, many civilians and much of law enforcement still do not trust lasers or understand their benefits, so

asking either to trust two electronic devices is almost a waste of breath.

To a large extent, civilian defensive handgun trends are driven by law enforcement. If the FBI or a major police department selects a particular handgun, ammunition, or sight, civilians are soon to follow. The Glock pistol is a perfect example of this phenomenon. Law enforcement's resistance to change is just the nature of the beast. The powers that be are generally long-term officers who learned to do things a certain way and to trust certain types of gear. Until they are convinced otherwise (good luck with that), or until they are replaced with the next generation, change will be seldom. Compound this with the facts that money does matter and it's hard to get a government agency to spend the kind of money needed for red dot sights or lasers. I know, they'll spend \$500 for a screwdriver, but money still matters.



**This MRDS sight from L3 Insight weighs less than an ounce.  
Here it is mounted on a riser for use on a handgun with a  
suppressor, or on a tactical rifle.**

Dave Biggers is a friend of mine. He used to work for XS Sights and introduced me to the XS Big Dot Sights. Though Dave will not admit it, he is a very talented firearms instructor. Dave understands what it takes to learn to shoot a handgun and do so effectively in a dynamic situation like a gunfight.

Dave has been working with several companies to sort out the problems with handguns and red dot sights. His vision is for a major handgun manufacturer to offer a red dot-equipped handgun. But he

also understands how important it is for that handgun to have sights, and Dave's concept is for the rear sight to be mated with or integral to the red dot sight. This is a magnificent idea. It would allow you to use either sight system as needs dictate.

Dave has even further refined this concept. His vision is for the sights not to co-witness with the reticle of the red dot sight, but rather to be visible below the reticle. This way the sights don't interfere with your ability to see the threat when you're using the reticle in the red dot sight to aim. It's an ingenious idea, and I'm completely confident this is where we are headed with handgun sighting systems. I'm also fairly confident that my friend Dave will not get the credit he deserves for his efforts to make this concept a reality, but make no mistake, when you see this system on a handgun and you realize how effective it is, Dave Biggers will be the man to thank.



**This Trijicon RMR sight is so small and lightweight, you'll be amazed it actually works. It is anything but cheap, and definitely not a gimmick.**

How big an asset is a red dot sight on a defensive handgun? With practice, you can reduce the time it takes you to engage multiple targets, fire multiple shots, and shoot on the move by as much as 20 percent! Is it as versatile as a laser? Probably not. You still have to get the gun up in front of your eyes to shoot it. However, it is more visible than a laser, because the dot is bigger and does not rely on reflection.

For many, cost will always be an issue, but until the issue of the visibility of open sights through the red dot sight is sorted out, cost really doesn't matter. It will happen though, and, as time goes by, costs will come down. Consider that the price of a current set of lasers grips is less than the first Glock laser pistol modifications Crimson Trace offered almost 20 years ago.

The future is coming. When it gets here, we will all shoot better and faster.





**Dave Biggers, an early proponent for XS Big Dot Sights, is working to advance the red dot handgun sight into the future.**



**In the future, expect red dot sights to get even smaller and lighter. It won't be long until some smart someone realizes they can incorporate a rear sight into the base of a red dot sight.**

## Chapter 10

## Why Light Matters

*Everything looks better with light on it.*

**I**t's after sunset, and Twiddle Dee and Twiddle Dum are parked around the corner of the liquor store, smoking a joint and listening to Pearl Jam on the radio. Their piece-of-junk Ford Probe is idling, because they're afraid that, if they turn it off, it will not start again. Twiddle Dum has a bottle of Mad Dog wine between his legs and a ring in his nose. Twiddle Dee is rolling another joint and complaining he forgot to pick up his food stamps today.

These fine, upstanding American citizens—actually, Twiddle Dum is an illegal alien—are looking for an easy score, a victim. A new Chevy Malibu just pulled up next to a streetlight that is not working. Between slugs on the bottle of Mad Dog and drags on the joint, Twiddle Dum notices a woman getting out of the car. He pokes his partner in crime in the ribs and says, “Let's go, dipshit.”

They both step out of the car.

The woman looks across the parking lot and notices the beat-up Probe, hears its engine running. She goes Condition Orange, reaches in her purse, and pulls out a Surefire E1B Backup flashlight. Taking a step back, putting the car between her and the potential threat, she clicks the button and sweeps the parking lot with the beam, stopping the light on the crappy car with the two goobers stumbling out of it.

Twiddle Dee shields his eyes from the 110 lumens of light and blurts, “Damn, bitch!”

The woman's other hand slips inside the side pouch of her Galco handbag and her fingers wrap around the Crimson Trace laser grips on a Kimber SOLO 9mm.

"What the hell!" exclaims Twiddle Dum, as he tosses the empty bottle of Mad Dog out into the parking lot and kicks the near-flat tire on his ghetto wagon. He pulls his fashionably sagging pants up, because they are about to fall off, and slides his worthless ass back in the car that Twiddle Dee already has in reverse. They back away into the darkness and then wheel out onto the street.

It won't be long. The lady gets back in her car with the doors locked and is on the phone with a 9-1-1 dispatcher, describing the two dirt bags and explaining their car has cracked rear glass and a taillight out. Cops like clues like that.

Some people are afraid of the dark and, frankly, their fears are justified. Not because of vampires, but because that's where real-life villains thrive. I worked the night shift for 13 years, long enough to realize why the privilege of working day shift came with seniority. Darkness gives the advantage to the predator, not the prey.



**Light is your friend, and the enemy of those who are not. Learn to use it!**



**A high-intensity flashlight can be your first line of defense. Let any potential predator know that, if he is going to attack you, he will not be able to do it in the dark.**

Nature's most effective predators are creatures of the night, and humans are indeed sophisticated mammals and predators. Even the dumbest human scoundrel knows his chances for success are substantially increased in the absence of light.

Why is light so important? Light is power. Light signifies authority, and it facilitates control. Imagine any disaster scene in the dark—a car wreck, a fire, or just a collection of police cars. If you want to know what's going on, you go to the guy with the flashlight. Light rules!

Bad guys like the anonymity darkness provides and the element of surprise. Regardless how old or gun savvy you and your family members are, if you and they can walk and talk, you can all manipulate a flashlight. When bad guys are looking for a score, they look for the easy one, the one that offers the most opportunity with the least risk. They'll lurk in the shadows, waiting. They don't want to be in the spot light or to draw attention. (RULE No. 9)

Light should be your first line of defense. Stay in the light and shine light on anything you cannot see clearly. Light can also be used as a stunning device; even brief exposure to 60-plus lumens of light at a close distance destroys vision momentarily. Control the light and you can better control any situation. Excitement in the dark leads to chaos, and shooting in darkness leads to misses. If you're serious about protecting yourself with a handgun, you should also be serious about flashlights. (RULE No. 8)

Two things you must do are identify the threat and see your gun's sights. This requires light, either ambient or man made. Night sights and lasers will help you with being able to see your sights on target, but they do nothing to help you verify the threat or see the target. (RULE No. 9)

Most consider about 60 lumens the minimum acceptable for a tactical light. I prefer 100 lumens. It gives more reach and has more stunning effect. A dual-output light with low and high illumination



settings, which can provide a bright beam for target identification, disorientation, and shooting and a dimmer beam for navigation, might be the best option. But lumens are just part of the flashlight triad that is lumens, lithium, and LED.

A self-defense/fighting light should have lithium batteries, because they have such staying power. In other words, their ability to work will not degrade over time. Granted, with high-output flashlights their run time is short, but, with lithium batteries, the light can live in your purse, nightstand, or glovebox for a year and be just as bright as the day you put it there. LED bulbs are much more shock resistant than incandescent bulbs, and this could be important if you drop your light or end up using it as a striking weapon.

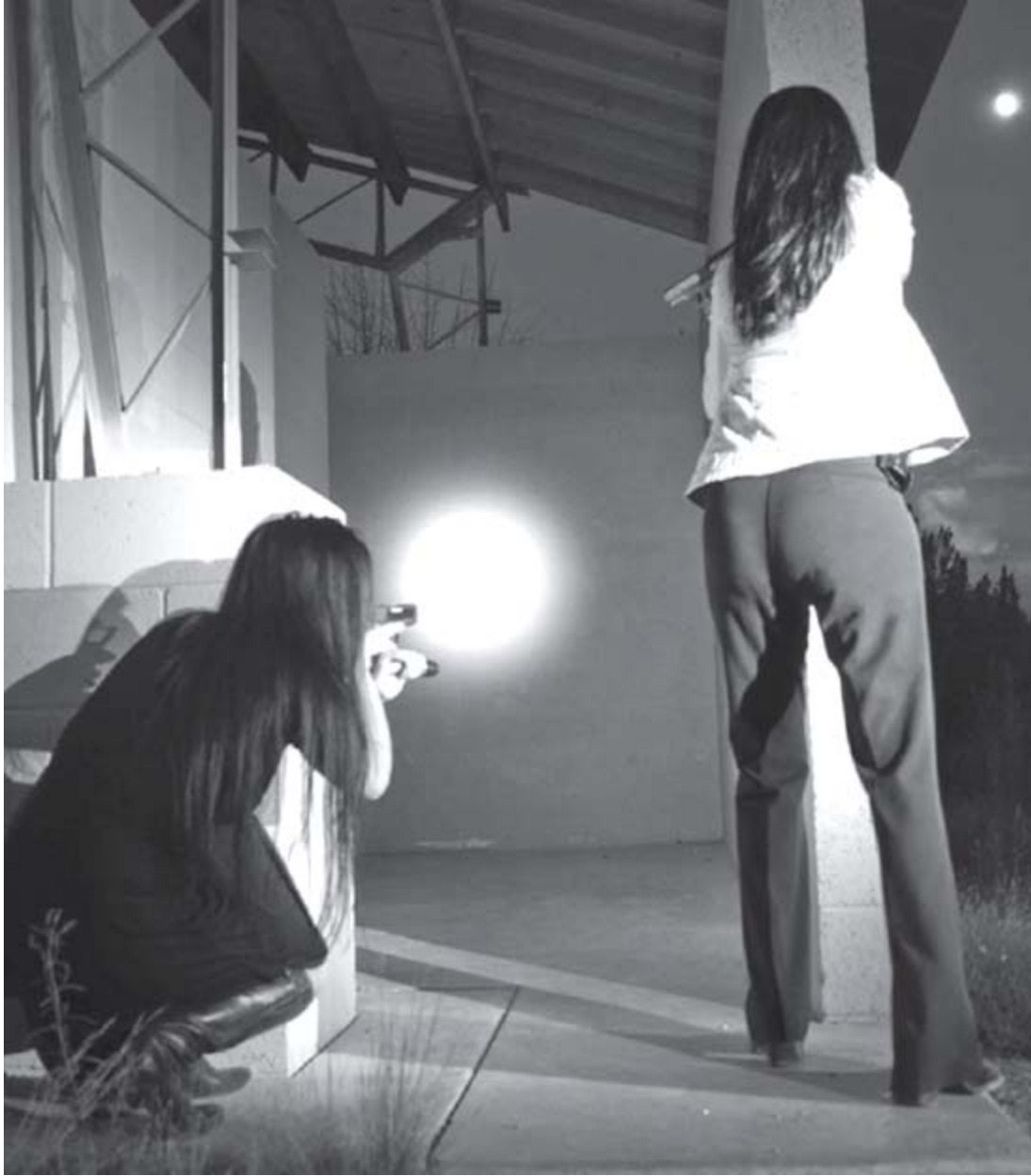
A survival/fighting light should also have the activation switch located on the end or tail-piece of the flashlight. This provides more positive activation under stress and works well with all popular flashlight shooting techniques. It also allows you to hold the flashlight so that you can strike with the bezel end; on many tactical flashlights, this end is semi-sharp and/or ragged to inflict more pain and damage. My wife and I both carry a Surefire E1B Backup light just about everywhere we go. My son even keeps one in his school backpack. With both a five- and 110-lumen output, the E1B meets these criteria. It's just four inches long and weighs only 2.8 ounces.

When it comes to light for personal protection—lights you can carry with you or use to help you shoot better—you have two options: a handheld light or a weapon-mounted light. Both will be covered in following chapters. What you should take away from this

chapter is how important light is to your ability to protect yourself, as well as the flashlight triad of lumens, lithium, and LED.



**Let's face it, you cannot carry a handgun everywhere and your kids cannot carry them anywhere. At least give them the power of light.**



**Everything looks better with light on it.**

## Chapter 11

# Handheld Lights

*Cold hearted orb that rules the night, removes the colors from our sight. Red is gray and yellow white but we decide which is right. And, which is an Illusion. —Moody Blues, “Knights in White Satin”*

**I**t wasn't all that long ago that a flashlight was just a flashlight. You picked one up at the dollar store, shoved some D-cells in it, and went on your way. About 20 years ago, one of the best flashlights you could buy was the standard old MagLite. This was the heavy and long aluminum flashlight preferred by cops, because it was bright and, well, stick-like.

Earlier, I admitted I was a bit scared when I became a cop. I was worried about my and my fellow officers' ability to shoot and about the things in the dark that might get me if I didn't see them soon enough. The big MagLite felt good in my hand, but it was mostly a battery-powered candle. I wanted to see everything!

As a family, we were barely making enough to get by. Not too long ago, my wife found a wish list we'd made soon after we were married. It was a list of things we wanted, but couldn't afford. We laughed at some of the things on the list like a magazine subscription I wanted and the curtains she did. We were not what I would call poor; we had a pot to piss in. It might not have been a pretty pot, but it was ours.

Still, I knew if I was not able to see in the dark when I was at work, I might not come home and be able to look at my lovely bride through our curtain-less windows. I broke down and bought a Surefire 8X flashlight. At the time, I think it cost about \$150! My wife, supportive like she has always been, never said a word, but the officers I worked with all laughed at me for spending that much money for a tool the department already issued. It wasn't long, though, before my fellow officers saw that light in action. It could turn night into day and make a smack-talking street punk think his retinas were burning out. Other officers followed suit, and soon every one on the night shift had a good, bright light.

How powerful can these little lights be? A state trooper friend put one in his rear pocket, bezel up, while writing a traffic ticket. He was seated in his car and forgot to turn it off. It burned a hole in his seat!

Things have changed, and today there are hundreds of bright, durable, compact flashlights designed with personal protection in mind. Surefire is probably the leader in this field, with many, many models to choose from.



**A Surefire E1B Backup. Five or 110 lumens, four inches long, and only 2.8 ounces. One of the best personal lights you can buy.**



**At 4.2 ounces and with either 15- or 200-lumen output, the Surefire LX2 LumaMax is a compact and powerful light.**



**The polymer-bodied G2X Tactical offers 200 lumens and weighs only four ounces. It's half the price of a comparable aluminum Surefire product.**

Here are some suggestions when selecting a self-defense light:

- **Minimum of 100 lumens.**
- **Powered by lithium batteries.**
- **LED bulbs**
- **Three to six inches in length.**
- **Optional lanyard attachment.**
- **Durable aluminum construction.**
- **Waterproof.**
- **Activation switch on the end of the tailpiece.**
- **Flood beams are better than spot.**

With a good, reliable light source in hand, the next question is, how do you use it in conjunction with your handgun? There are several techniques, and they all have their pros and cons. In reality, there is no best answer other than maybe becoming proficient with all the techniques and employing the one that best fits the situation.

## **The FBI Technique**

Thinking bad guys might shoot at your light because they think that's where you are, the FBI developed this technique to protect its agents. With the FBI technique, you hold the flashlight away from your body, out to the side and up in your non-shooting hand as you search for and engage targets.

This is a tactically sound method for searching, but once you start shooting, muzzle blast will give away your location center. This sort of negates the need to hold the flashlight away from your body and negatively impacts your ability to shoot accurately, because you are shooting with one hand. Also, by having an arm extended away from your body, you unbalance your shooting platform.





**With the FBI Technique, the light is held away from and in front of your body. This is a good thing. However, when shooting with this technique, you have only one hand on the gun.**

## **Neck Index**

Maybe best thought of as a progression technique, the neck index technique lets you transition from looking to shooting. Let's say you're using the FBI technique to search and see a threat. You can pull the light to the neck index method as you start your weapon presentation. If you need to shoot fast, you can shoot with one hand from here. If time allows, you can transition to one of the two-handed flashlight techniques. With the light indexed at your neck,

it's similar to your support hand being at the center of your body, as it should be during normal weapon presentation.

With this technique, pull your non-shooting hand with the flashlight up to your chin, beam end orientated toward the threat. If you have hard to see sights, this method will help illuminate them. It will also illuminate some of you, but you get a lot of lumens quickly directed toward the bad guy.





**The neck index method should probably be your default flashlight position once you decide to draw your handgun, since it mimics placing your support hand at center body. It is easy to transition to other flashlight shooting positions from this one.**

## **The Harries Technique**

Embraced by Gunsite, this technique is likely the most often taught technique at law enforcement academies. Why? Partly because it works just as well with flashlights that have the activation button on the end as they do with it on the flashlight body, partly because it's easy to use, and partly because the technique emulates the Weaver stance.

With the Harries technique, you lock your wrists or the backsides of your hands together. To employ, slip your non-shooting hand, which is holding the flashlight, under your shooting arm and then lower the elbow of your non-shooting hand by rotating your non-shooting arm at the shoulder. This applies pressure against the backside of your shooting hand and makes for a relatively stable shooting platform.

The downside comes from assuming the position in a hurry. It takes some time to perfect this position without sweeping your support hand with the gun's muzzle as you present the weapon. Ideally, you should fully present the weapon to the target with your strong hand. Then slip your support hand with the flashlight under your shooting arm. You could start by assuming the neck index position with the flashlight illuminating the threat. After the handgun has been pointed towards the threat, then transition to the Harries Technique.

## **Surefire Technique**

This is, perhaps, the safest and fastest to assume of any of the flashlight techniques, but possibly the most difficult to master. To perform the Surefire technique, you'll need a small-bodied flashlight with an activation button on the end of the tailpiece and, ideally, a rubber grommet positioned just a few inches forward from the end of the light. Surefire manufactures lights just for this purpose, such as its AZ2 Combat Light.



**Surefire's AZ2 Combat Light is specifically designed to be used with the Surefire flashlight technique.**

Hold the flashlight like a syringe, between the index and the middle finger of your shooting hand, with the activation switch placed against your palm. Grip the handgun as when using a normal two-handed grip, but only using the bottom two fingers of your non-

shooting hand as part of that grip. Your index finger, middle finger, and thumb are used to hold and orientate the light. To activate the light, squeeze it like a syringe, pushing the activation button with your palm.

The trick is learning to orientate the light with the handgun. Most commonly, shooters tend to point the light toward the ground. This is not all that bad. Generally there will be enough light reflected off the ground or ambient light from the beam to light up the target. The Surefire Technique takes practice to master, but, once you learn it, it's fast. If this becomes your preferred technique, you might consider carrying or searching with your flashlight while holding it like a syringe so you can more swiftly assume the Surefire flashlight shooting technique.



**The Surefire flashlight technique allows for the more stable two-handed grip, but takes practice to master.**

## **Generally Speaking**

The Harries and Surefire techniques do offer the most stable shooting platforms, but they have a major drawback. If you are searching your home, backyard, or anywhere else using either technique, whatever you point your flashlight at is also being pointed at with your handgun. Remember RULE No. 2? This could be potentially dangerous when you discover that bump in the night was your wife stealing a piece of your favorite dessert out of the fridge, or your teenage son looking at porn on the Internet. This is, of course, the same drawback with weapon-mounted lights.

Alternately, if you select a light with a wide flood beam, you can search using these techniques while holding the handgun at the low ready position and looking with the edge of the beam. Still, the potential for problematic response is there, and it's not always a good idea to have your handgun out if you don't know exactly what you might be facing. (RULE No. 8)

A safer approach would be to keep the handgun in the holster, at your side, or tucked in tight against your body at the close ready with the muzzle pointed in a safe direction. If you encounter a threat, you can immediately transition to the neck index technique, point your pistol, and assume the Harries technique, or just transition right into the Surefire technique. The best solution is a handheld light used in conjunction with a weapon-mounted light. That will be discussed in the [next chapter](#).

Finally, a lanyard on your light is always a good idea. It keeps the light close at hand if you accidentally drop it or if you need to let go of it to open doors, call 9-1-1 or, maybe even perform a reload.

The flashlight by itself is a powerful self-defense tool that can and should be used independently of the handgun. Use it when you're walking across a parking lot, or even on the sidewalk to check alleys or suspicious characters. I spent my honeymoon in the French Quarter of New Orleans and carried a compact tactical flashlight (and a Colt Lightweight Commander), during every day or night excursion on Bourbon Street and beyond. In the dark, in low light, and even during the day, a flashlight can be your first line of defense. It can illuminate a situation, unmask what's lurking in the shadows, and momentarily blind adversaries, allowing you to create distance, draw your handgun, and engage if necessary.





**The problem with searching while using the Harries or Surefire flashlight techniques is that whatever you look at with the light will also have your gun pointed at it. If you are looking at a werewolf, that's a good thing. If you are looking at a family member, it's not.**



**When using a lanyard on a flashlight, adjust it so that the light is held tight against your hand. Do not allow any space between your hand and the flashlight, otherwise the light will swing freely and get in your way.**

## Chapter 12

# Weapon- Mounted Lights

*See Dick's gun? See the light on Dick's Gun? Dick will use this light for threat verification, not to find Jane!*

Most modern handguns these days have an accessory rail, and many companies offer high-output lights that can be attached to these rails. Some even have an integrated laser. Most are moderately easy to activate while maintaining a normal two-hand grip. Having the light attached directly to your handgun frees up your support hand to open doors, call 9-1-1, and conduct reloads. So a weapons light is a good idea, right?

The downside to a weapon-mounted light is the exact same thing that makes them an asset—it's mounted to your handgun. This makes finding a holster that will work with your handgun more complicated (though not entirely impossible), and if a weapon-mounted light is all you have, it makes it impossible to search the darkness with your weapon-mounted light without also pointing the gun at everything you look at. When is it permissible to disobey RULE No. 2? Never!

So what's the deal? Why are weapon-mounted lights so popular, and why do gun writers and those who manufacture weapons lights make such a big deal out of them? For starters, they're cool, and cool stuff always gets attention. If men could figure out a way to attach their mistress to their handgun, or if ladies could attach

complementary jewelry or high heels, that would be cool, too. Obviously, both are stupid ideas, but you get the point.

Here's the thing. Weapon-mounted lights can be a very, *very* valuable tool for dealing with a lethal confrontation, as long as you use them sensibly. Just like the Glock pistol, laser sights, and smart phones, weapon-mounted lights are not the be all end all of personal protection with a handgun. They are nothing more than another tool that can, in certain circumstances, be very beneficial to helping you solve a problem.



**The combination of a weapon light and a laser on your defensive handgun is powerful. When engaging a threat, you**

**will be able to see the threat, blind the threat, and accurately shoot the threat.**



**Surefire's X300 Weapon Light was a breakthrough, but the obvious downside was that a handgun had to have an accessory rail in order for the light to be mounted. Also, activation of the light was neither instant nor instinctive.**



**Surefire's X400 Weapon Light combines a laser with the light and also adds instinctive and instant activation. However, the unit still needs an accessory rail for mounting.**

Surefire, with its X300 weapon mounted light, was the first company to make a quality light compact enough for installation on

a handgun. Still, it was a large unit, and finding a holster that fit your gun with an X300 attached was like finding a virgin backstage at a Def Leppard concert.

Other companies like Insight and Viridian followed suit with lights and laser/light combo units that attach to these accessory rails. If all you wanted was a gun to keep at home and never carry, the lack of holster availability is a non-issue. I've never been one who subscribed to the "house gun" concept, where it's a different gun than you carry or a gun with accessories other than what are on your carry gun. I think that, for most folks, especially those with limited shooting experience, all their defensive guns should be the same, if not at least very similar.

Do I follow my own advice? Kinda. I carry a Commander-sized 1911 most often, and in the Stack-On gun safe beside my bed I have another Commander, but the bedside gun is fitted with a Crimson Trace Light Guard. Evolutionarily speaking, the Crimson Trace Light Guard is probably the most advanced weapon-mounted light now available. They are attached by sandwiching the trigger guard between the two durable polymer sides of the unit. The unit is not as wide as the handgun; it's very compact. Sure, you will still need a special holster, but with a carry tool like the Versacarry, I can still very comfortably carry my Commander.



**If you like the idea of a light mounted to your handgun, the Crimson Trace Light Guard is probably the best option. It is compact, bright, and offers instinctive activation.**

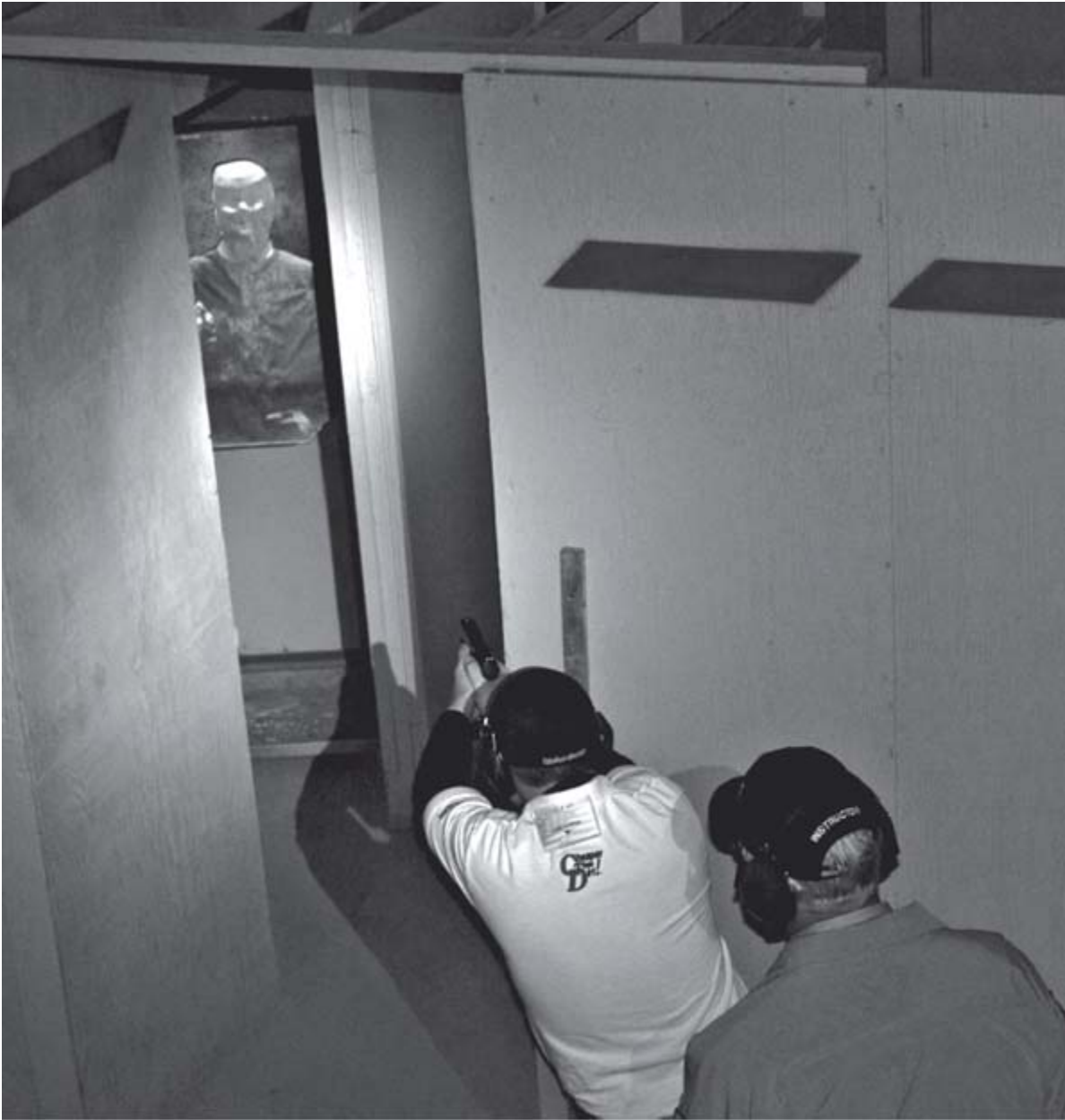


**With an inside the waistband (IWB) holster like the VersaCarry, the addition of a Crimson Trace Light Guard will not negatively impact your ability to carry your handgun concealed.**



Why do I have a weapon-mounted light on the gun I keep by my bed and not on the gun I carry most often? The bedside gun is a backup. If I wake up in the middle of the night, still in a fog from sleep, I may not have the presence of mind to pick up my Surefire AZ2 Combat Light that's kept in the safe with my handgun. If that happens, I'll still have light available. Just as important, it's easier to shoot in the dark with a weapon-mounted light than with a handheld light. Again, the downside is searching or looking for something to shoot at.





**Yes, weapon-mounted lights can be problematic when searching. But, if you have to shoot at the reaper in the dark, a weapon-mounted light and a laser can increase your odds for success dramatically.**

Before explaining an approach to solving this problem, let's look at what you should consider when selecting a weapon-mounted light. Just as with a handheld light, it should offer no less than 100

lumens. It should be powered by lithium batteries and have an LED bulb. Also like with a handgun-mounted laser, it should offer instant/instinctive activation. You should not have to do anything other than grip your handgun to make the light come on.

If we have a weapon-mounted light that meets these requirements, we can then look for a way to circumvent the problem of searching with it while simultaneously pointing the gun at things we do not want to destroy. You daughter's boyfriend throwing pebbles at your daughter's window does not count as something you want to destroy. It should. It doesn't. (RULE No. 2)

The simple answer is to use a handheld light on a lanyard. Wrap the lanyard around the palm of your hand—not your wrist—and do your looking with the flashlight, not the weapon light. If you see something that should be addressed with the handgun, assume a handheld flashlight shooting technique and shoot it. Or, let go of the light, establish a firm two-handed grip on your handgun, and making the weapon light come on, and then shoot. If your handgun has Crimson Trace laser grips and a Crimson Trace Light Guard, not only will you see the threat clearly, you will also be able to focus on the threat and shoot accurately.

Okay, but what if your handheld flashlight pukes on you and quits working, what if you can't find it, what if you drop it, or what if you are caught out without it? Well, you can search with the weapon-mounted light reasonably well if it has a wide, flood-like beam. Just keep the weapon orientated towards the ground out as far in front of you as reasonably safe and look with the edge of the beam. Is that an ideal approach? No, but it's better than stumbling around in the dark waiting to come face to face with Dracula.

From a practical standpoint, a weapon-mounted light might be best on a carry gun. In a self-defense shooting, there can be little time to react or attempt to de-escalate the situation. You may need to draw and shoot right *now*! With a weapon-mounted light in a situation like that, you will instantly be able to see, verify, and engage the threat. The downside, of course, is that you are adding bulk and weight to a tool you selected due to its *lack* of bulk and weight.

Something else to consider, no matter the type light you have, is light discipline. You don't want to give away your position hiding behind the toy box until you absolutely have to. Of course, it could also be argued that, if someone is creeping through your home and they see two light beams, they may think they are outnumbered and go next door where that little old lady lives.

The bottom line is that we have to have light to effectively deal with a threat. That light can come from the sun, the moon, a streetlight, or a lava lamp. However, we cannot count on any of those to be shining when the reaper comes knocking. Have a light nearby, keep one with your handgun, or carry one with you all the time. You'll find they come in handy for many things like finding your cell phone when you drop it in a dark theater or, like my friend Dick Williams often does, reading a menu in a dark restaurant.

One thing we can be reasonably sure of is that, if in that dark theater in Aurora, Colorado, in 2012, someone in one of the front rows would have shined 100 lumens in the face of the joker, painted his chest with a red dot, and then proceeded to empty their Smith &

Wesson M&P into his chest, the outcome would have been very, very different!

## Chapter 13

# Calibers & Ammunition

*Handgun stopping power has very little to do with cartridges, calibers, and bullets.*

**W**hen men like Bat Masterson were carrying the Colt Peacemaker, all defensive handguns were loaded with soft lead bullets. Handgun velocities were low, and those lead bullets did nothing more than poke a hole in someone. It wasn't until the hollowpoint lead bullet and the jacketed lead bullet came along that the wounding potential of the defensive handgun was truly enhanced.

Prior to that, the caliber of the handgun was much more important, because bullets very seldom expanded. As centerfire cartridge and bullet technology advanced, caliber became less important. This was because higher velocities could be achieved and bullets could be made to expand.

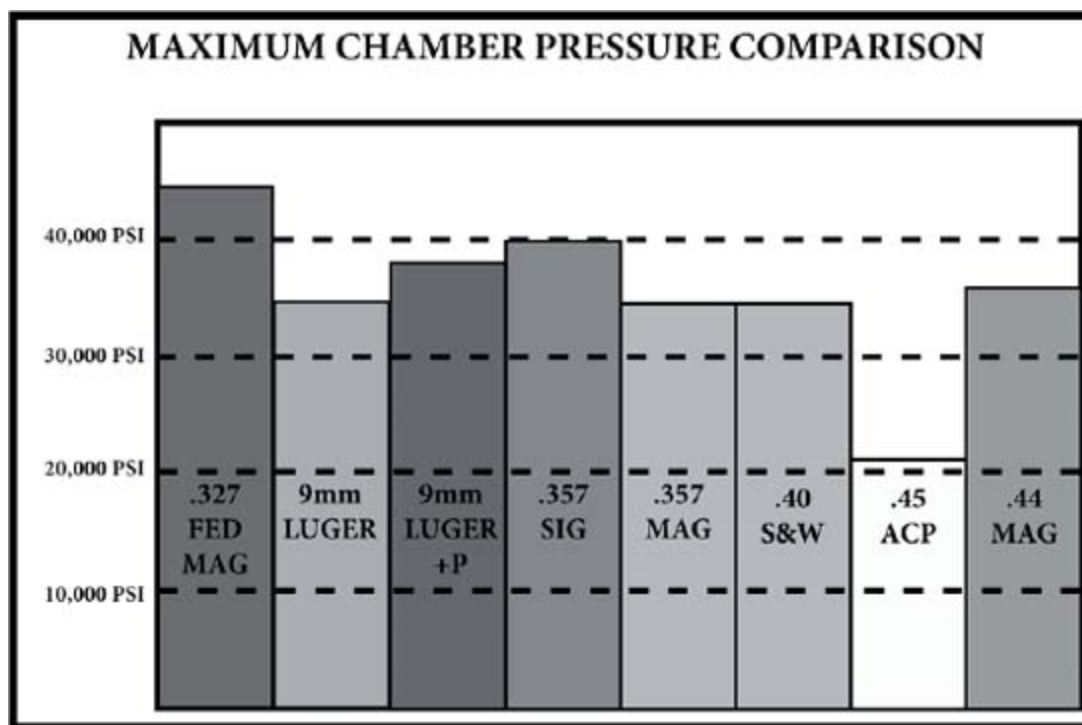


**Pure lead bullets launched at low velocities do very little damage inside the human body.**

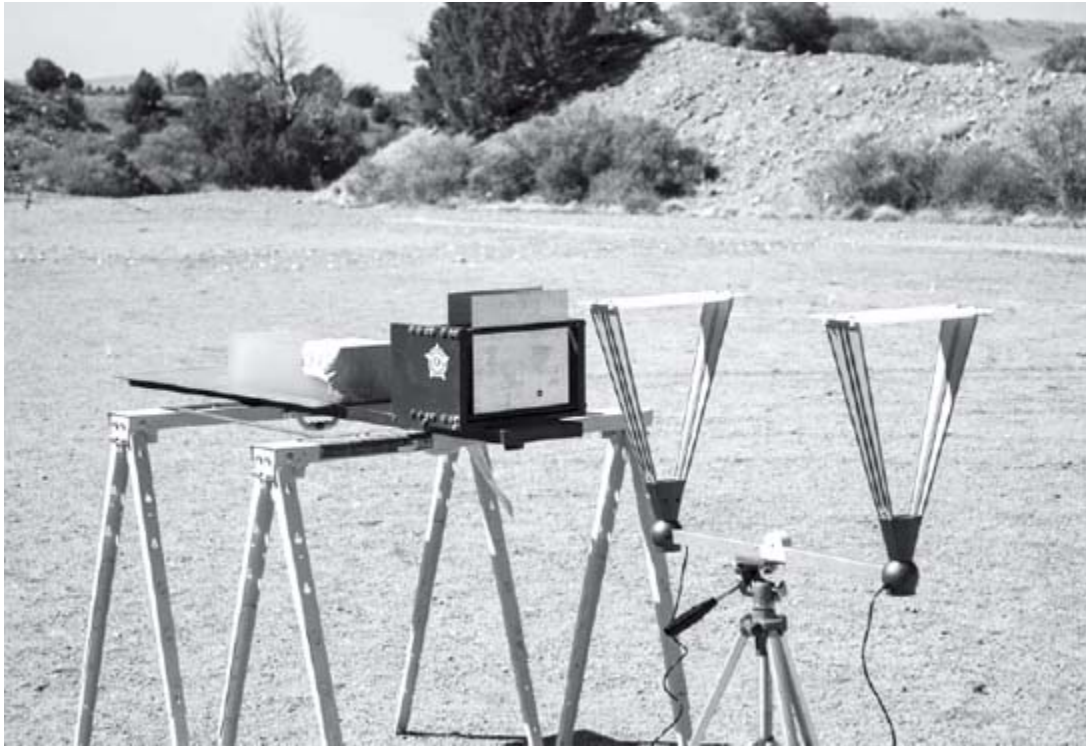


**Defensive handgun cartridges from the oldest to the newest (left to right): 9mm Luger (1902), .45 ACP (1905), .40 S&W (1990), .357 SIG (1994), and .327 Federal Magnum (2008).**

The 9mm Luger cartridge has been with us since 1902, and the .45 ACP since 1905. When compared to more modern cartridges like the .357 SIG, .40 S&W, and the .327 Federal Magnum, the 9mm and the .45 ACP are antiques. This antiquity isn't just because of their ages. The .45 ACP operates at a maximum average chamber pressure (MAP) of only 21,000 psi, and the newer .40 S&W at 35,000 psi. Amazingly, the .327 Federal Magnum has a MAP of 45,000 psi, making it the highest pressure defensive handgun cartridge available, even more so than the .44 Magnum, which has a MAP of 36,000 psi.



**Maximum Chamber Pressure Comparison**



**When it comes to terminal performance testing, the FBI has a collection of specific tests that involve evaluating a bullet's ability to shoot through intermediate barriers.**

Plus-P loadings for the .45 ACP push pressures up to 23,000 psi, and 9mm Luger + P loads average around 38,000 psi. The pressures that defensive handgun cartridges produce inside a chamber are rarely given much thought, but they are indeed important. These higher pressures are what allow smaller-caliber cartridges to deliver terminal performance on par with larger-caliber cartridges.

Pressure aside, the most important advancement in defensive handgun ammunition has been in bullets. Most modern defensive handgun bullets are made with a copper jacket that surrounds a lead or lead alloy core. Sometimes this jacket is actually bonded to the core so that there will be no separation during the deformation that



comes from impact. While jacket and core separation can increase the wounding potential of a bullet, it can decrease penetration.

Due mostly to the efforts of the FBI and its bullet testing methodology, the current trend in the manufacture of defensive handgun bullets is toward those that can pass through barriers like thick clothing, wall board, and even auto glass and yet still expand and penetrate deeply. Building bullets to do this is not rocket science. In fact, building a bullet is nothing more than creating design criteria that balances a bullet's ability to penetrate with its ability to expand. The wider a given bullet expands, the less it penetrates.



**These four modern .45 ACP loads represent the current evolution of the modern defensive handgun bullet. Left to right: Speer Gold Dot, Federal Hydra-Shok, Remington Golden Saber, and the Barnes TAC-XP.**

Most modern defensive handgun projectiles like the Speer Gold Dot, Federal Hydra-Shok, Remington Golden Saber, and the all copper Barnes TAC-XP bullets are what many consider to be the perfect balance of expansion and penetration, and all these bullets have been optimized to perform well in the FBI's testing protocol.

All these bullets are also launched from what is known as a "metallic cartridge." A metallic cartridge consists of a brass case that has a primer in one end and a bullet in the other. Inside the case is

gunpowder, and when the hammer, firing pin, or striker of the handgun hits the primer, it causes the gunpowder to burn. This, in turn, creates gas and pressure, enough to force the bullet out of the case and down the barrel.

The bullet is a very small mechanical device constructed of lead, lead alloy, and/or gilding metal or copper. I describe it as a mechanical device, because it is designed to perform work. This work is to penetrate, change shape, and damage tissue. A bullet is not magic. It is not unfailingly lethal. All a bullet is capable of doing is damaging tissue, and bullets fired from handguns damage very little tissue.

As a bullet travels down the barrel, it engages the spiraled rifling in the barrel and begins to spin at a rate of about one revolution for every foot traveled. This “spin” helps stabilize the bullet in flight and allows it to hit nose first and on the spot where the handgun’s barrel/sights were pointed.



As the bullet impacts living tissue at speeds approaching 700 miles per hour, it begins to deform, because lead and copper alloys are relatively soft. As it deforms, it gets flatter and bigger around. In just a few inches, the bullet has fully deformed, because it has slowed to a speed where the materials the bullet are constructed of are tough enough to resist further deformation. At this point, the bullet will continue to move through the tissue, losing speed very quickly.

Most bullets will come to rest after penetrating about a foot or less of human tissue that will contain muscle, bone, cartilage, and fat. What's left is a small hole that will, on average, measure about four to five cubic inches. By comparison, that's about the size of a very long Cuban cigar. This hole, depending on what it passes through, will cause pain and blood loss. When enough blood is lost (in most handgun wounds to the thoracic cavity, this can happen in as fast as 10 seconds—or can take much, much longer), the brain becomes oxygen deprived and unconsciousness results. If the pain is intense enough, it can also cause unconsciousness. This unconsciousness equals incapacitation and effectively stops the attacker. If there is enough blood loss, death will be the end result, possibly before consciousness has been regained.

The attacker might also stop his assault out of fear of being shot, fear of the shot he has received, or from the pain the shot has caused. The ultimate goal of using a defensive handgun is to *stop the attacker* and, from a practical standpoint, it matters not how this stop is achieved. In most cases, when a handgun is pointed at someone, they stop doing whatever it was that caused that handgun to be pointed at them. Just ask any cop what the most common reaction is when he points his duty handgun at someone! This fear of getting shot is the best example of handgun stopping power.



The modern defensive handgun bullet is built to meet the performance standards set forth by the FBI. Good or bad, this is the reality, and to meet this requirement, most modern handgun bullets are bonded, such as you'll see in all the Winchester PDX1 ammunition.



**This 100-grain hardcast lead bullet load for the .380 ACP from Buffalo Bore will not expand, but it will penetrate more than 30 inches in 10-percent ordnance gelatin.**

The FBI's work with regards to defensive handgun ammunition or stopping power is not the final word. In fact, it is almost impossible to get two people who are passionate about defensive handgun bullets to agree on anything. For instance, Tim Sundles of Buffalo Bore ammunition is a big fan of hardcast, non-expanding lead bullets. They will penetrate deeper than any other bullet type, and Tim has numerous testimonials to support his affinity for this type of projectile. The search for what works best has been an ongoing pursuit for more than 100 years. The problem is no one can agree on what the actual definition of "best" is.

Many organizations, agencies, and individuals have developed tests and formulas to rate the effectiveness of defensive handgun cartridges and calibers. One of the first of note and often referenced occurred in 1904, when U.S. Army Capt. John Thompson and Maj. Louis LaGarde shot live steers and human cadavers for that purpose. Julian Hatcher, a former technical editor at *American Rifleman*, based his theory of Relative Stopping Power on this study, concluding the .45 ACP FMJ bullet to be twice as effective as a 9mm FMJ bullet.

In 1975, the National Institute of Justice finalized the Relative Incapacitation Index, which was later updated in 1985. This study was based on hypothetical assumptions and a computer-generated human. This study rated the 115-grain 9mm FMJ round twice as effective as a 230-grain .45 ACP FMJ round. Go figure, two studies with the exact opposite conclusions.

After the tragic 1986 shootout in Miami, the FBI established its testing methodology using 10-percent ordnance gelatin and various intermediate barriers. During this shootout, two FBI agents were killed and others were wounded by a bank robber who had just been shot with a 115-grain 9mm Winchester Silvertip. It was the FBI's opinion that the bullet had not penetrated deep enough and that, if it had gone deeper, it would have stopped the gun-wielding madman sooner.

Maybe so. Probably not.

The FBI's research concluded that, for law enforcement, the minimum acceptable bullet penetration depth was 12 inches. Essentially, they rated the .45 ACP twice as effective as the 9mm and considered 147-grain 9mm bullets much better than 115-grain bullets. Ultimately, the FBI could not decide which was best either, so it split the difference, settling on what is now the .40 S&W.



**Which is better? The .45 ACP FMJ load or the 9mm FMJ load? It depends on who you ask.**

As it is with all theories, problems exist with the FBI's methodology. Heavily weighted by a bullet's ability to shoot

through things like glass, wall board, and cloth, it could be argued the FBI testing protocol is better at identifying bullets for shooting through things rather than for stopping bad guys.

In 1991, a privately funded research group began studying the physiological effects of bullet impact on medium-sized animals in an attempt to isolate the physical mechanism responsible for rapid incapacitation of man-sized targets. They wanted to know why humans fall down when they get shot. This became known as what some consider the mythical—meaning *never happened*—Strasbourg Tests. Supposedly, 61 pickup truck loads of goats were terminated in the testing, thereby providing average incapacitation times for the most popular defensive handgun loads of the day.



.45 AUTOMATIC PISTOL: Point-blank weapon with punch to knock over any man n matter where it wounds him. Usually a side-arm for guard duty, emergency

Okay, so maybe the guy who wrote this caption didn't get it exactly right. But this Korean War-era photo shows how urban legend regarding the .45 has clouded the minds of shooters: "...



**knock over any man no matter where it wounds him.” Come on, really?**



**The Glaser Safety Slug is a jacketed bullet with a polymer cap. Inside the bullet are either No. 6 or No. 12 shot pellets. When this bullet impacts ordnance gelatin or human flesh, it comes apart and releases the shot inside. Tissue damage is massive, even though penetration is limited, so getting shot with one of these would have to hurt worse than heartache.**

The Strasbourg Tests, if they actually happened, had two important findings. First, frangible bullets, like Glaser Safety Slugs, and hollowpoints that violently expand and transfer a great deal of energy very quickly produced the fastest incapacitation times. Second, when bullets impact ribs—this happens about 50 percent of

the time, in defensive shootings—incapacitation times are *usually* increased.

One reason this study has so many critics is that it tends to demonstrate that bullets that *don't* retain most of their weight are more effective at stopping bad guys. To the casual practitioner, it contradicted everything the FBI's methodology seemed to champion. For one, bullets capable of damaging the most tissue are not bullets capable of shooting through intermediate barriers *and* still show meaningful penetration in a bad guy or a block of Jell-O.

The argument generated by this study (beyond the idea of if the study ever even occurred at all), was just another “What's best?” type. Is it a bullet that retains its mass and drives deep, or a bullet that will effectively damage the most tissue? Those 100-percent behind the FBI's methodology argued it may be necessary to shoot through barriers to hit bad guys. This is true, but that's a situation more likely to occur with a police officer than with someone who is being mugged, raped, or robbed.

The same year as the infamous goat shootings, the Naval Weapons Support Center tested 10 separate 9mm loads, seeking the best hollowpoint for use by the Naval Investigative Service. Along with terminal performance and reliability, accuracy was also evaluated. Unlike the FBI, they used 20-percent ordnance gelatin, because it was determined by the Wound Ballistics Lab at the Letterman Army Institute of Research to offer the best simulation of muscle tissue. (Remember now, the FBI's opinion was that 10-percent gelatin was the test media that best replicated human tissue.) With the assumption that penetration beyond 12 inches would be hazardous

to bystanders, they concluded Federal's 147-grain JHP to be the best.

Surprisingly, not all Federal agencies follow the FBI's lead with regards to ammo selection. In 1987, the Secret Service also commissioned a study of 9mm ammunition. It was based on a bullet's ability to deposit energy in the first 5.9 inches of 20-percent ordnance gelatin. The supporting logic was the greater the energy deposit, the greater the potential for tissue damage. The winner: Winchester's 115-grain + P + JHP.



**The FBI places a great deal of importance on a handgun bullet's ability to pass through rugged intermediate barriers like auto glass and still expand and penetrate to at least 12 inches.**



**Though it gets little respect, the .327 Federal Magnum cartridge is indeed a powerhouse and can be an above-average performer. It will damage a lot of tissue and drive deep. Recoil is also more than average.**

All this illustrates is that nobody seems to agree on, well, hardly anything. The problem is humans cannot resist the urge to rate everything from football teams to members of the opposite sex with numbers. For example, there's little consensus on whether Britney Spears is a five, an eight, or a 10. And ratings change based on the mood and influences on the rater. After spending almost two weeks hunting Cape buffalo in Mozambique, I'd have given Britney a 10.5 the day after I left for home. Home for two days, she would have been lucky to get an eight, and her stock was in serious decline, at least with me.

The fact is, a shooting is a chaotic event, and numbers cannot effectively quantify chaos. And no matter the criteria, the bias of evaluators *always* creeps in the equation and anomalies *always* exist.

Sometimes I believe we're looking at the entire idea of stopping power from the wrong perspective. The intent with a defensive handgun is to stop, not kill. However, sometimes the only way to stop an attacker is to kill them. This is because adrenalin is a pain suppressor and so are methamphetamines, alcohol, and narcotics. Your attacker may be so mad or tripped out from licking a Colorado River toad's ass he simply cannot feel pain. In that instance, you'll have to rely on your bullet's ability to bring about death, or at least deprive the brain of enough oxygen so that it will discontinue control of the rest of the body.

It would seem that our best bet, when it comes to selecting ammunition we hope can quickly bring about incapacitation through blood loss, is twofold. It needs to penetrate deep enough to damage vital organs, and it needs to destroy as much tissue as possible. The more tissue it destroys, the more the wound will hurt and the more blood will be lost. The more the wound hurts, the more likely the bad guy is apt to say, "Enough of this shit," and run away. In a case where your attacker is unaffected by the pain, the more blood loss that occurs, the more likely the troll is to lose consciousness while he is attempting to beat you over the head with a dragon femur. So, with the ability of adrenalin and controlled substances to take pain out of the equation, we cannot rely on it. We need bullets that can be driven deep enough to pierce vital organs through and through.

But here's the conundrum. The bullets that penetrate the deepest are often the bullets that damage the least amount of tissue. A bullet fired from a defensive handgun can only do so much. If it expands wide and makes a big hole, it will likely not penetrate very deep. On the other hand, if it does not expand at all, it will shoot through walls and even multiple bad guys. So, what is the best bet answer?

For the last three years, I have worked with the National Rifle Association as the Ammo Editor of *Shooting Illustrated* magazine. One of my duties has been to test at least one defensive handgun load each week in 10-percent ordnance gelatin. Needless to say, I've learned a lot. (You simply cannot shoot that many bullets into an expansion medium and not learn something.) Surprisingly, one thing I've found is that there is not a tremendous amount of difference between common defensive handgun cartridges. Depending on the bullet and velocity, it can be nearly impossible to determine what load was shot into a gelatin block.

Initially, I thought all this data would help me do something amazingly smart like develop a formula that would help determine or categorize the effectiveness of defensive handgun calibers or ammunition. If that is indeed possible to do with the data I have amassed, I am not smart enough to figure it out. However, I did sort of stumble on a unique approach to the concept of selecting a defensive cartridge and ammunition. This approach is, like me, hillbilly simple, and it's based on the average performance of every load I've ever tested.

Average is something we all hope to aspire to be better than. However, average is something a lot of folks will accept. Every woman wants a man who is above average looking but, truth be

told, she'll settle for average when the bartender screams, "Last call!" If we go to a shooting match and do not win or finish in the top three, we would at least like to say, "My performance was average," or, better yet, "better than average."



**These nine 160-grain Barnes TAC-XP bullets were fired into 10-percent ordnance gelatin at velocities ranging from 800 to 1,200 fps. Their consistency is remarkable. Few defensive handgun bullets can perform this consistently over a 400 fps velocity spread.**



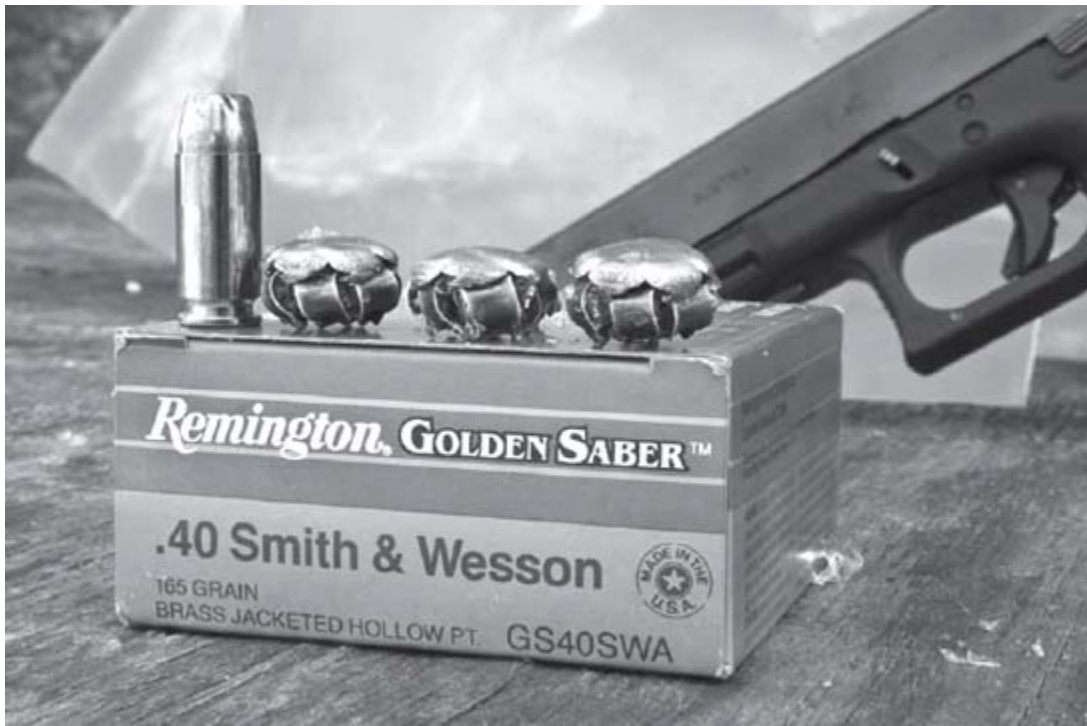
**Not all handgun loads are designed for shooting bad guys, but they can be effective for other bad things, like snakes, vermin, and even dogs that might want to eat you. I'm betting one of these CCI shotshell loads, fired into the face of a bad guy, would blind him and be a bit more painful than squeezing a bad zit.**

Here's the thing. When it come to predicting how fast or how good a certain caliber or bullet is at stopping a bad guy, all we can do is guess. I don't care how many Jell-O blocks we shoot, how many autopsies we attend, or how many bad guys we poke with bullets, rating the effectiveness of defensive handgun cartridges or loads is nothing but a guess. A guess that might not even qualify as being a WAG (Wild Ass Guess). There are simply just too many variables to calculate.

For example, when dealing with a shot to a bad guy's torso, there is a 50-percent chance the bullet will hit a rib. Impact with bone has a way of changing how a bullet performs. Additionally, it is scientifically impossible to predict, with anything near certainty, the affect those bullet impact-generated bone fragments will have inside the thoracic cavity. It is just as impossible to predict how the human will react to the pain caused by the bullet. Depending on the human mindset, adrenalin, and chemical substances within the body, a human shot with a .22 LR in the left nipple might collapse instantly, while one shot in the right nipple with a .45 may fight on for as long as 20 seconds.

Let's step back and applaud all the smart folks who have conducted intricate and time-consuming studies working towards the prediction of handgun stopping power. Their efforts were valiant and conducted with good intentions. However, their results and conclusions are nothing more than speculation. For every real-world instance where one of these theories has been proven valid, there is another instance where the opposite was true.





**When considering terminal performance, consistency matters. Bullets that perform the same way every time are the only ones that should be trusted.**

I'll say it again, poking a hole in a human being with a very small and lightweight projectile is a chaotic event. In many instances, we might be able to predict the ultimate outcome of the event, but we simply cannot, with any certainty, predict what will transpire during the 30 seconds immediately following the shooting. What we can do is hedge our bets.

By hedging our bets, I mean we can choose a caliber/cartridge/bullet combination that will most assuredly deliver better than average results. And, when it comes to comparing the subtle differences in the terminal performance of defensive handgun cartridges, better than average is about as fine of a line as we can draw.

Let me see if I can illustrate this. If you are comparing a .45 ACP load (A) and a 9mm load (B) that have been tested in 10-percent ordnance gelatin, and load A penetrates 14 inches and load B penetrates 13 inches, you might say that load A is a better option. But, what if the bullet fired by load B expands more than the bullet fired by load A by a tenth of an inch? Load B penetrated an inch less than load A, but, due to its expanded diameter, it made a bigger hole. Which load is better? As a point of fact, there is really no way to definitively determine the answer.

There are two elements of terminal performance that we can measure with certainty: penetration and the recovered diameter of the bullet. These are indeed two of the factors that influence the size of the hole a bullet makes inside a bad guy (or a block of gelatin). In fact, if we treat this hole as a cylinder, we can compute its volume by using penetration as the length of the cylinder and the recovered diameter of the bullet as the diameter of the cylinder.

What about bullet weight? It really doesn't matter. I know this may come as a shock to many, but the unfired and recovered weight of the bullet is only pertinent to the bullet's ability to penetrate. True, we can reasonably assume that a heavier bullet will penetrate deeper, but penetration depth, not bullet weight, is what contributes to wounding. Once we establish penetration depth, bullet weight is of no consequence.

Then there's velocity. Velocity is one of the most important factors with regards to terminal performance, because velocity in conjunction with bullet weight and bullet design (how the bullet expands), is what determines how the bullet will behave inside a human body or a test medium. Too much velocity can make a bullet

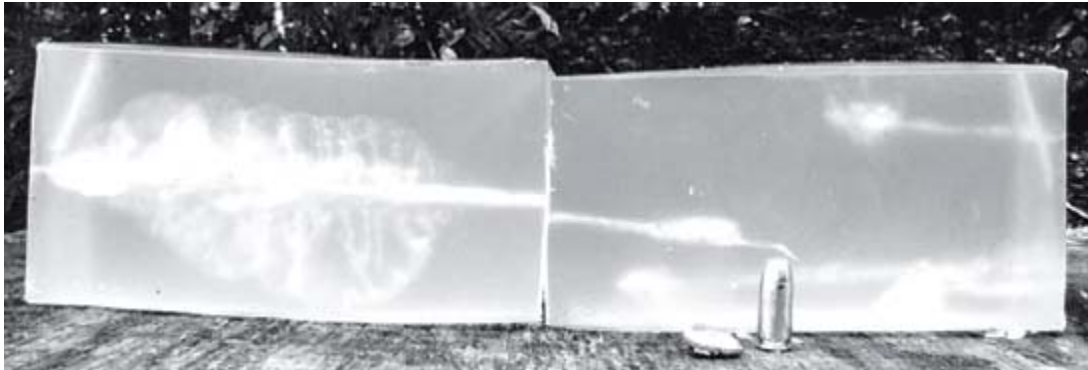
come apart, not enough velocity and a bullet won't expand. The former will give limited penetration and the latter will make a small-diameter hole. Velocity does something else, as well. It creates a splash inside the gelatin or a bad guy. Since both are mostly made of water, it is similar to throwing a rock into a pond. The harder you throw the rock, the bigger the splash.



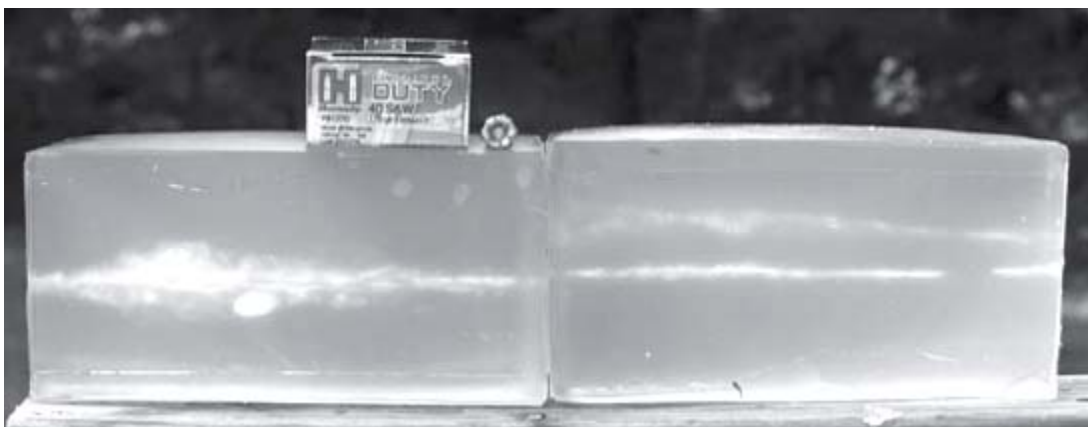
**Sometimes bullets just do not work as designed. In the case of this Federal .45 ACP load, it was determined that the core material used was harder than the design criteria specified. When Federal was made aware of the issue, it pulled this lot of ammo from shelves.**

This splash has to have some bearing on at least the pain a bullet can cause and, to some extent, wounding. When you look into a

gelatin block and see the distortion radiating out from the bullet's path, that distortion is caused by velocity. The more velocity the bullet has as it passes through the gelatin, the more distortion that will be visible. Problem is, we cannot reliably measure this distortion, nor can we reliably predict its influence on wounding or pain.



**High-velocity loads like this 185-grain .45 ACP load from DoubleTap Ammunition create a big splash when they hit. This is evident by looking at the damage inside the gel block. Will it be better at stopping a bad guy? Who knows? But from a pain standpoint, you'd think this would hurt really bad.**



**This 135-grain 9mm + P load from Hornady completely penetrated two gel blocks, but did not expand very wide**

**compared to the 185-grain .45 ACP load in the top photo. It was also not moving as fast. By looking at the damage inside the gel block, I think it would be reasonable to assume that, all things being equal, this bullet would cause less pain.**



**How much does velocity matter? These two 9mm Federal Guard Dog loads were fired into 10-percent ordnance gelatin.**

**The recovered bullet on the left was fired from a five-inch barrel and had an impact velocity of 1,305 fps. The one on the right was fired from a compact handgun with a three-inch barrel and had an impact velocity of 1,109 fps.**

All we can really say with any certainty about velocity is that more velocity is better. Before you throw this book in the trash and head off to your computer to find some Internet forum to trash me on, consider the .38 Special and the .357 Magnum. They fire the same diameter bullet, but the .357 Magnum will fire that bullet much faster. History has shown, without any doubt, that the .357 Magnum is better at stopping bad guys than the .38 Special. Still,

we cannot *quantify* the advantage more velocity gives a certain bullet or cartridge. Again, all we can say is that, everything else being equal, more velocity is better.

Let's get back to the "better than average" (BTA) concept of selecting a defensive handgun cartridge and load. I've written several articles on this topic, and as simple as the BTA concept might be, I still consider it a work in progress. This is because the question remains as to what is the best way to determine "average" with regards to the terminal performance of defensive handgun ammunition? What ballistic aspects should be considered? Velocity? Energy? Expansion? Penetration? Wound cavity? Maybe all the above? Too, should the BTA method be used only to compare loads from the same cartridge, or does it apply across the board to any defensive handgun cartridge? Furthermore, how can we effectively determine an average unless we test every single load, for every defensive pistol cartridge, at every potential velocity?

Keep in mind that barrel length has a tremendous affect on velocity, which in turn will determine terminal performance. A certain load fired from a five-inch barrel will very likely perform very differently when fired from a three-inch barrel. In fact, the difference can be so extreme that, from the shorter barrel, the bullet may not expand at all. We cannot test them all. Tomorrow, someone will handload, or some company will offer, something new. And not only does barrel length affect terminal performance, velocities from two identical handguns with the same barrel length can vary as much as 50 fps. Believe it or not, a 50 fps variation in velocity can be enough to change terminal performance, particularly if the

impact velocity is right at the edge of the bullet's performance window.

After gelatin testing more than 200 loads from defensive handguns in calibers from .22 to .45, I figured I had enough data to establish a respectable overall average, as well as a reasonable average for individual cartridges. Sure, if you added 10 new loads to the test data and all those loads either showed very wide expansion or very deep penetration, my averages would change. However, by selecting a representative sample of the loads available in each chambering, I feel the averages I have established are accurate, at least within a margin of error of plus or minus five percent.

My determination of averages excludes velocity, caliber, and bullet weight. Why? All three of these elements only influence the actual penetration and expanded diameter of the bullet. By themselves they offer no wounding value.

Based on my testing, it was determined that BTA terminal performance for a defensive handgun cartridge would be one that penetrates more than 13.72 inches and has an expanded diameter of more than .58-inch. Of the 201 loads tested, 65 exceeded the required minimum penetration depth of 13.72 inches, and 71 of the loads had a recovered, expanded diameter of .58-inch or more. Only 33 loads performed above average in both the penetration and expansion categories.

What should you take from this data? Well, you can for sure feel confident that, if you use one of the loads listed, you can expect better than average terminal performance if they impact at the listed velocity. In reality, I'm not sure that means any more than being able to say you have an above average looking girlfriend or above

average intelligence. I know several folks with above average intelligence who cannot send an e-mail or fix toast in an oven. I also know some women who are above average looking who I cannot stand to be in the same room with for fear I might choke the living shit out of them.



**Buffalo Bore ammunition is most often associated with big-bore cartridges and hardcast bullets. However, Buffalo Bore offers a wide range of loads for defensive handguns. This 125-grain Tactical Load is an above average performer.**





**My current carry load for the .45 ACP is from Wilson Combat. It's a Barnes 160-grain TAC-XP bullet that leaves the barrel of my Commander around 1,050 fps. This is an above average load for the .45 ACP and is very controllable to shoot.**

If you think an extra inch of penetration, an extra  $\frac{1}{10}$ -inch of expansion, 10 fps or 20 more grains of bullet weight really, really matters, I won't tell you you're wrong, but I will tell you that no bad guy or coroner can determine the miniscule amount of difference in terminal performance these miniscule differences will make.

Personally, I think the most important fact that can be taken from this data is that, with the exception of the very small cartridges like the .22 LR, .25 Auto, and .32 Long, better than average performance can be found with any cartridge commonly chambered in a defensive handgun. If you like the 9 "Sillymeter," as some like to call it, there are BTA loads for it. Same goes for the .38 Special and the .327 Federal Magnum.

Remember what Cooper said, “*Diligentia, vis, celeritas*”—DVC—Accuracy, power and speed. The key is finding a balance between all three. From a concealed carry standpoint, the best advice I can offer would be to select the smallest, easiest to carry, most powerful handgun/cartridge combination with which you can flawlessly perform the Forty-Five Drill (see [Chapter 17](#)) to standard every time. If you find that combo, fill the magazine or the cylinder of that handgun with a BTA load and go about your business not worrying about terminal performance.

**Table 8-1: BTA—Better Than Average—Loads for Defensive Handguns**

LOAD	IV	PEN	RD	RW
.327 Federal Magnum				
Speer 115 gr. Gold Dot HP	1438	16.50	0.65	113

.380 AUTO				
Remington 102 gr. Golden Saber	883	13.75	0.59	102

9mm Luger				
Buffalo Bore 115 gr. TAC XP	1284	17.75	0.60	115
Buffalo Bore 115 gr. TAC XP (short-barrel)	1158	16.75	0.64	115
Double Tap 147 gr. Bonded Defense JHP	1066	15.00	0.70	147
Remington 124 gr. Golden Saber +P	1068	15.00	0.64	124
ASYM 115 gr. Barnes TAC XP + P	1273	15.00	0.59	115

.38 Special				
Speer 135 gr. GD Short Barrel	865	14.50	0.58	134

.357 Magnum				
Buffalo Bore 125 gr. Tactical	1416	23.00	0.59	125
Wilson Combat 125 gr. XPB	1359	19.25	0.60	125
Federal 180 gr. JHP	1195	17.5	0.63	180

.40 Smith & Wesson				
Double Tap 125 gr. Barnes TAC-XP	1419	17.25	0.60	125
Remington 180 gr. JHP	957	16.75	0.61	180
Black Hills 140 gr. Barnes TAC-XP	1194	15.75	0.69	140
Federal 165 gr. Hydra-Shok	965	15.50	0.58	165
Remington 165 gr. Golden Saber	1117	14.50	0.67	165
Wilson Combat 140 gr. Barnes TAC-XP	1195	14.25	0.73	140
DoubleTap 180 gr. Nosler JHP	1081	14.25	0.70	177
Remington 180 gr. BJHP Home Defense	981	13.75	0.78	180
Double Tap 140 gr. Barnes TAC-XP	1163	13.75	0.72	140

.45 ACP					
	Wilson Combat 200 gr. XTP HP	955	17.25	0.59	184
	Remington 185 gr. Golden Saber	964	17.00	0.68	185
	Federal 230 gr. Hydra-Shok	807	16.50	0.67	129
	DoubleTap 160 gr. TAC XP MANN Load	1114	16.50	0.63	160
	Remington 230 gr. BJHP Home Defense	927	16.00	0.65	230
	CorBon 160 gr. TAC XP	1111	15.00	0.75	160
	Wilson Combat 160 gr. TAC XP	1080	14.00	0.75	160
	Winchester 230 gr. Black Talon	855	15.00	0.74	230
	ASYM 230 gr. Bonded	723	15.00	0.73	230
	Federal 230 gr. HST	897	15.00	0.73	230
	Speer 185 gr. Gold Dot HP	1080	14.00	0.72	185
	DoubleTap 160 Barnes TAC-XP +P	1248	14.00	0.62	160

.460 Rowland					
	Wilson Combat 230 gr. Hornady XTP	1180	16.75	0.62	156

**Table 8-2: BTA Performance by Cartridge**

CARTRIDGE	IV	PEN	RD	RW
.22 Long Rifle	11.0	0.29	33	
.32 Long, .32 NAA, .32 H&R Magnum	1100	15.0	0.41	73
.327 Federal Magnum	1400	16.25	0.50	105
.380 ACP	995	11.75	0.54	85
9mm Luger	1200	14.25	0.57	112
.38 Special	945	11.50	0.53	118
.357 Magnum 1430	18.0	0.50	106	
.40 Smith & Wesson	1150	13.25	0.68	147
.45 ACP	995	13.5	0.69	175

*NOTE: This chart shows the average velocity and terminal performance of each cartridge when fired into 10-percent ordnance gelatin. If you're looking for BTA performance from any of these cartridges, it would exceed the results shown in this table. If you*

*would like to conduct some terminal performance testing on your own to determine what other loads might be better than average, Appendix B contains instructions for mixing and shooting into ordnance gelatin.*

## Chapter 14

# Introduction to Training

*The hardest thing to learn is something you do not want to believe.*

**W**hen I took over as the firearms instructor at my police department, I had a goal. It was to change the way the officers I worked with trained. The department shipped me off to a very fine National Rifle Association school to become a Tactical Law Enforcement Firearms Instructor. The course instructor was a former Brit by the name of Clive Shepherd, and I learned a lot. Maybe the most important thing I learned was what I feared the most—that my Department probably did not want to change the way they trained.

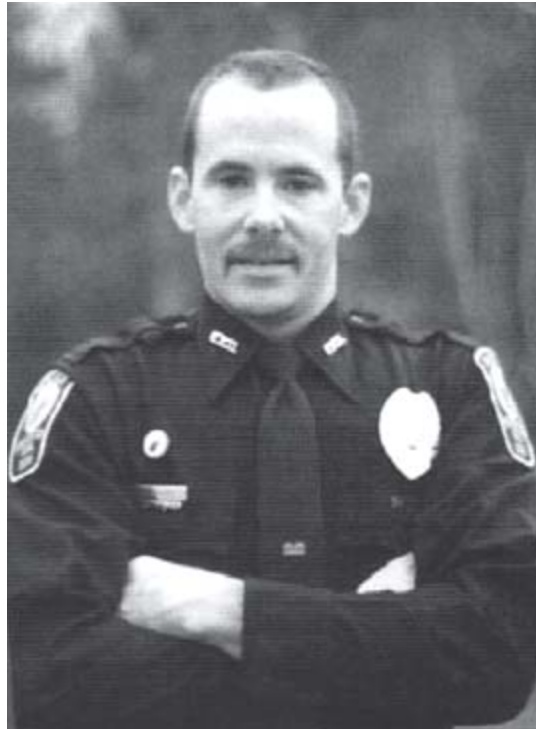
Still, I was determined.

After the course, I had a brief consultation with the Chief, and my fears were confirmed. There was a general lack of interest, funds, and enthusiasm on the part of my fellow officers, as well as the department and the city, to do anything that might cost more money or take up more of anyone's time.

I needed a plan.

The state mandated that every officer qualify twice each year and that one of those qualifications had to be at night. So, instead of trying to convince anyone we needed to update our training program, I decided I would create a qualification program that

would replicate potential real-world situations. No more “old school” standing in one place and shooting. The next thing I did was to have that qualification program approved by the NRA. Once I had the NRA’s stamp of approval, I presented my lesson plan to the Chief in written form for department approval. As expected, he didn’t read it, mostly, I suspect, because he didn’t understand it.



**I spent most of my military and law enforcement career as a trainer. You would think that during that time I learned how to teach. What I really learned was how to shoot and play politics.**

Qualification day finally arrived, and there were moans and groans from most. When the sun set, about half the officers had failed to qualify. Successful qualification was, after all, a condition of employment, and since the NRA had approved the qualification course, I kinda had the department over a barrel.

The next day, the Chief—who had failed to qualify—called me into his office, his best worried look plastered on his face. In a roundabout way he suggested we go back to the old qualification course. I explained that, since it was a documented fact many of his officers could not perform to standard on an approved NRA course of fire (which replicated real-world situations), disregard for this lack of proficiency would be akin to deliberate indifference.

I presented a solution, offering to take each officer to the range by themselves and during their shift. That way it would be less of a burden on scheduling. It would also give me time to work with each officer one on one to help them develop the skills they needed to qualify and, more importantly, save their lives. Officers who had issues with certain aspects of the course could be trained on the spot. Though still skeptical, the Chief bought into the idea, and attitudes started to change, especially after the officers found they could do things with a handgun they had never done before.

One of the things I mandated in the qualification course was that, in every drill, the officer had to move to cover before, during, or after engaging the target. Failure to move to cover resulted in failing the qualification. About a year after this mandate was instituted, an officer was involved in a shooting. Afterwards, the officer told me he felt the only reason he'd survived was because our qualification course had conditioned him to find cover. (RULE No. 10.) By the way, this is a good learning point and something you should consider integrating into your practice regime. When you progress through this training plan to the evaluation exercises, consider incorporating movement to find cover in those drills. In a real-world situation, you might not shoot fast enough, you might miss, and



your bullets might fail to have the desired effect. In light of all that, utilizing cover is *never* a bad idea.

When I switched departments and went to work for the Railroad Police, I was astonished to find the most simplistic qualification course you could imagine. However, twice each year, the Railroad Police dedicated a full day to real-world tactical training. In some ways this had merit. It provided a means of establishing proficiency with a handgun, even if it was on the most basic of levels. It also allowed for continuing education on the application of the defensive handgun. The problem with this approach was that, without the incentive of having to perform the more realistic, scenario-based drills to a standard, officers had no motivation to actually get any better.

I'm sharing this not to demonstrate how smart or conniving I am, but to make a point. Training without evaluation is useless, and training without a goal or a standard that must be met is damn near just as useless.

The practice drills presented in this book are specifically designed to give you the skills needed to meet the performance standards of the evaluation drills that follow them. The performance drills will test your ability to demonstrate what some might consider to be a moderate to advanced level shooting. In reality, it matters not how these drills are classified. What matters is that, if performed to standard, they are a collection of skills that will increase your survivability in a fight and give you confidence in your abilities with a handgun.

If you can meet the minimum standard for each of the evaluation drills listed, you can feel confident you can shoot a handgun as good

as, if not better than, 80 percent of the police officers in this country. This may come as a surprise to you, but most police officers are not gun guys or gals. For most of our uniformed heroes, the handgun is just another tool, one no different than their flashlight, radar gun, or radio. Ironically, it is a police officer's least-used tool, but probably the only tool they would not go to work without.

Though many law enforcement officers might find this book beneficial, it was not written for cops. It was precisely and specifically written for the civilian gun owner who wants to develop their handgun shooting skills to the point where they believe those skills will help them successfully survive a life or death encounter.

As you have found by now, this book rides heavily on the shoulders of Col. Jeff Cooper and his teachings to the Modern Technique of the Pistol. The understanding of the Modern Technique, the Combat Triad, and the triangular balance of accuracy, power, and speed are the basis for all the training and evaluation drills you will find here.

You will need several items to conduct the training and evaluation drills presented in this book. What follows is a brief look at each one.

## **Handgun**

Choosing the tool you hope will save your life is a very important thing. It's not like ordering a meal at a restaurant. You don't have to eat a meal you do not like, and, if you choose not to eat it, you can stop at Denny's on the way home, order a bowl of grease and, within two days, be none the worse for the wear. Get the wrong

gun, though, and you may end up with a pain Roloids won't rub off or a mark a Band-aid won't cover.

Selecting a handgun is personal—too personal to allow me or anyone else to do it for you. That said, it needs to fit your hand, have a recoil impulse you can control, and be small enough and light enough you might actually carry it and have it with you when you need it. Yes, you need to *like* it.

Not I nor anyone else is qualified to make those decisions for you. I don't want you buying my underwear and I'll bet you don't want me picking out yours. *Never* buy a defensive handgun unless you have fired at least a box of ammo through one like it, and don't be afraid to spend some money. With handguns, you often get exactly what you pay for in terms of longevity and reliability. Having said all that, I can offer some advice based on my experiences teaching others to shoot:

- **A single-action semi-automatic handgun like the 1911 is not just a pistol for a professional. In fact, many new shooters find the single-action trigger easier to learn, and they find the thumb safety to be a common-sense switch.**
- **Compact revolvers are very often the worst first gun for a man or a woman. Their short sight radius makes them difficult to shoot accurately, the triggers are generally hard to pull, and the recoil is often objectionable.**
- **Most shooters will find they can comfortably shoot a 9mm handgun that weighs anywhere between 20 and 30 ounces.**
- **The smaller a handgun gets, the easier it is to carry and the harder it is to shoot. If you are a new shooter,**

**consider a full-size/duty-size pistol as a starter sidearm.**

- **If you are reading this book, it is likely you are hoping to learn how to shoot a defensive handgun better. The only way you can do this is by shooting—a lot. So, don't discount a .22 LR handgun, and it might even be wise to select a handgun for which you can purchase a .22 LR conversion kit.**
- **Get a handgun laser of some sort. It will be a tremendous help to you while trying to learn the secret and, very possibly, during a life or death encounter.**
- **Select a handgun that has easy to see sights or have the handgun fitted with sights that are easy to see.**

## **Shot Timer**

A shot timer is nothing but an electronic stopwatch that reacts to sound. It allows you to accurately evaluate the speed of your shooting tasks, and to do this by yourself. Various models ranging in price on either side of a hundred bucks are available, but you can also find aps that will turn a smart phone into a shot timer. A good shot timer will not only tell you the time from the buzzer to your last shot, it will also tell you the split times, the time between shots. Both can be helpful.



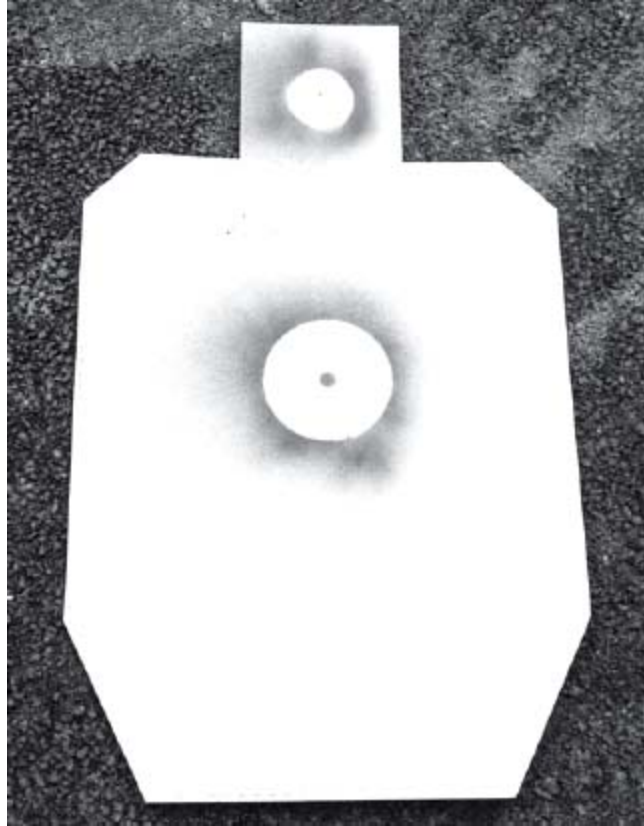
**A shot timer is a very important training aid. If you are serious about defensive handgun shooting, you need one.**

## **Silhouette Targets**

There are many different types of silhouette targets on the market, and, for every target, there is an expert somewhere preaching its virtues. From a pure engagement standpoint, at least as far as the drills in this book are concerned, I don't think it matters as long as the target generally replicates the size of the average human torso.



**To make your training targets, you will need the standard cardboard IPSC target, spray paint, an old DVD, a snuff can or other 2.5-inch circle, and a ruler.**



**The finished target should look like this. Of course you can paint more or less and in any color you choose.**

That said, I like the cardboard IPSC or IDPA-type targets, because they are a different color on each side and because, since they are cardboard, they are easy to mount to a target stand. For the purposes of the training in this book, you will ignore the scoring rings on the target, because you will be painting your own.

There will be two scoring rings that we will call “vital zones.” The V1 scoring ring is a five-inch circle, and all you will need to paint this on the target is an old DVD disc. The V2 scoring ring is also a circle, but only 2.5 inches in diameter, which is the same diameter of a snuff can. Just place the DVD or snuff can on the target and spray paint around its circumference. You will also need a ruler to properly position these rings on whichever silhouette target you

choose to use. The V2 zone goes in the center of the head, and the V1 Zone is positioned 12 inches, center to center, below it.

## Target Stands

Target stands can be simple or complicated, and you can purchase commercial target stands or make your own. I generally prefer the latter, for one reason: they are cheaper, and I live on gun writer's income. Regardless which type stand you choose, you will need some wooden slats to hold your silhouette upright and a stapler with which to attach the target to the uprights.



**You can purchase metal target stands from a variety of Internet sources, but it can be both easier and much less expensive to make your own out of scrap lumber.**



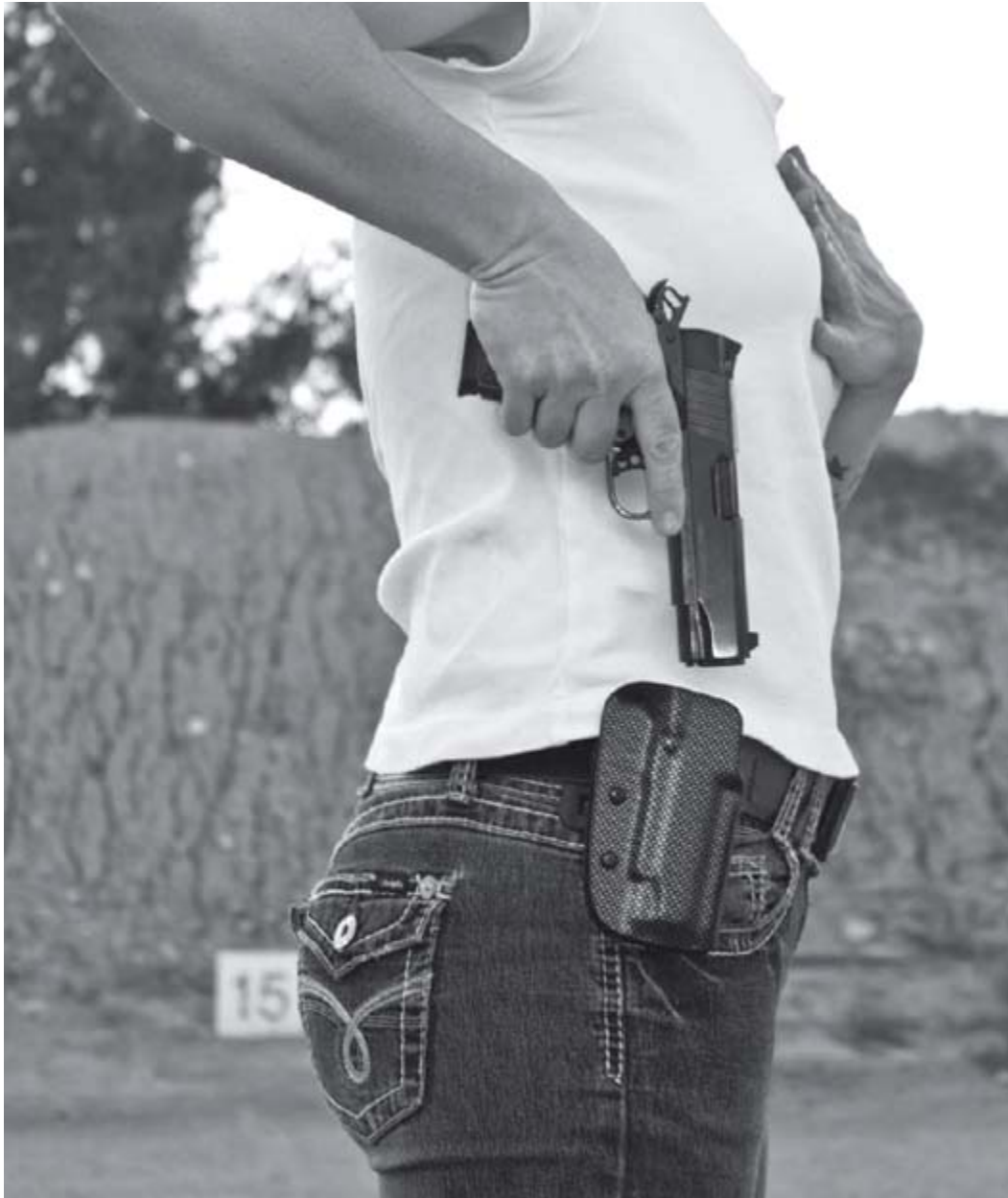


**Galco's Avenger holster is a great rig and the author's range training holster of choice.**

## **Holster**

You will also need a holster, and I recommend a quality leather holster designed to be worn on the outside of your pants on your

strong-side hip. Sure, ultimately you hope to be carrying concealed, but few concealable holsters offer the ease of holstering that a hip holster does, and during your training you will be holstering many times. Once you have successfully completed the evaluation drills, you can then transition to a good concealable holster and revisit those drills.



**Surprise! A woman's body is different than a man's! This fact most often necessitates a different holster style for female shooters.**

A note here to women. In case you didn't know it, you are made different than men. Most holsters are designed for men who have straight hips. If you are the least bit shapely, you will find it hard to work with a man's holster. Your options are to wear your pants lower on your hips (as opposed to above them), or to find a good drop-type holster that cants the handgun out away from your body.

Holster selection is a very personal thing, so for me to suggest a style would be somewhat presumptuous. I can tell you that, with regards to leather holsters, you will be hard pressed to find a better selection or better quality for the price than those from Galco. I would, however, avoid a range training holster that has a retention strap.

## **Extra Ammunition**

You will need an extra magazine if you are working with a semi-auto handgun, or a speedloader if you are shooting a revolver. With either, you will also need a mechanism to carry them in, so a magazine pouch or speedloader pouch is a must for range training. Again, once you are ready to transition to concealed carry, you can explore and work with alternate carry methods for your reload.

## **The Right Attitude**

Approaching training with the right attitude is as important as any piece of equipment you'll use. You need to be patient but eager,

open minded but focused and, most importantly, dedicated. I think finding and maintaining the proper attitude is more difficult for a man than a woman. This is because survival and protection are desires that are hardwired into the male of the human species. We take it personally and are hesitant to admit or find out we don't know all there is about either one. Women have the same instinct but, in my experience, are more open to taking advice.



**You should have at least two extra magazines for a pistol and at least two speedloaders for a revolver before you begin your training.**



**Generally speaking, women are more open to learning about how to shoot than are men. Many men think they know it all already.**

I'll readily admit that the training plan I have put forth in this book is not the only way, and may not even be the best way. My feelings would not be hurt if you chose another. However, I can tell you with solid confidence that regardless which program of instruction you choose, you'd best play along, because if the method is any good, it will require commitment and a modicum of respect.

Interestingly, women are more likely to follow along without second guessing the procedure, while men are more apt to put up walls and disagree along the way. Case in point: I've attended more than a dozen different training sessions at Gunsite with various gun writers, industry, and average folks. It never fails that at least one of

those in attendance will want to argue with the instructor, and it's generally a man.

Asking "Why?" is never wrong, but, when training, you should keep an open mind and at least try what you are being taught. If you find the method to be faulty or the instructor to be a regular dipshit, then you can discount what they're teaching. But always, as long as it is safe, play along. You just might learn something.

The hardest thing to learn is something you do not want to believe. If you do not believe the training plan presented in this book can help you, it won't.

## Chapter 15

# Dry-Fire Practice

*Crawl first, run later.*

**D**ry-fire practice involves working with a handgun that is unloaded. The goal with dry-fire practice is to become more familiar with the handgun and develop a relationship with the trigger, sights, controls, and presentation. Dry-fire practice can cover several aspects of learning to shoot and handle a handgun. Covered here are sight alignment and trigger control, handgun presentation, and reloading.

Even if you consider yourself an average shooter, I would urge you to become devoted to dry-fire practice. I've been shooting most of my life, and hardly a day goes by that I do not dry-fire practice in some way, shape, or form with a firearm.

Presented here are several dry-fire practice drills, and you should feel free to devise your own and experiment. *The No. 1, most important aspect of dry-fire practice is to ensure the handgun is unloaded.* I would also recommend you conduct your dry-fire practice in a location where there is no live ammunition even present, and always, *always* point your handgun in a direction that is safe. (RULEs No. 1-4)

## DRILL 1: Sight Alignment & Trigger Control

As stated in [Chapter 1](#), sight alignment and trigger control are the secret to accurate handgun shooting. Without command of these two actions, which must be orchestrated simultaneously, you will not hit what you aim at. All you are required to do when dry-fire practicing sight alignment and trigger control is to operate the trigger while the sights are properly aligned on the target. First, though, we need to discuss what proper sight alignment is.

### SIGHT PICTURES



### SIX O'CLOCK HOLD



### DEAD ON HOLD

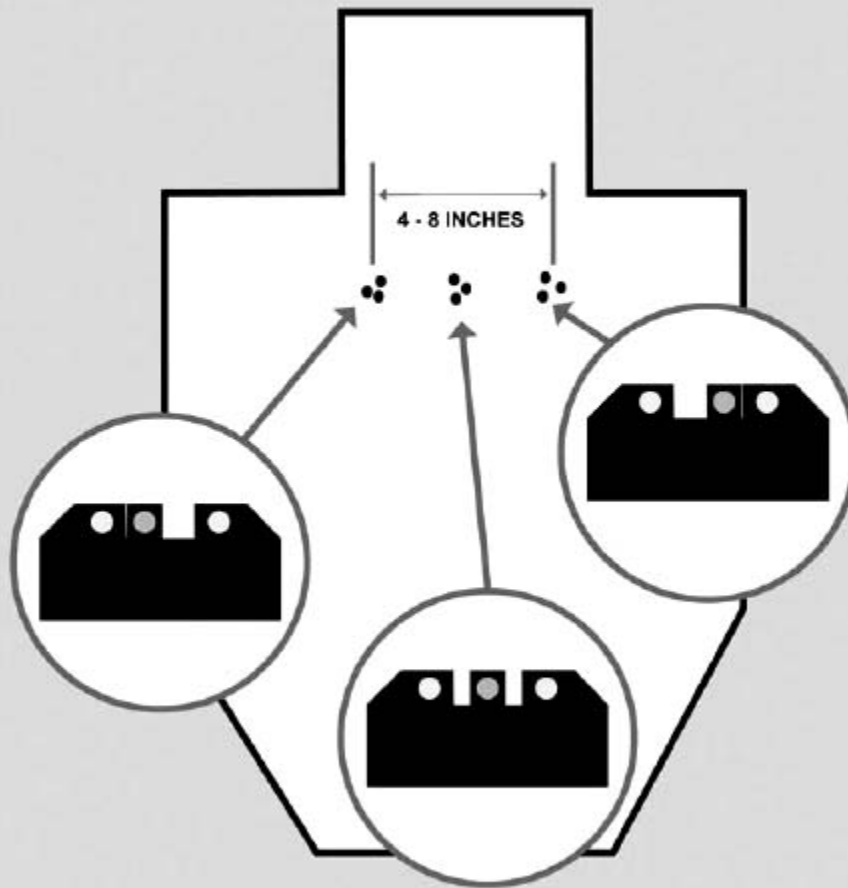
Regardless the type of iron sights on your handgun, they require that the front sight be centered in the rear sight. There is some contention as to exactly how a sight is to be aligned on the *target*. Some prefer the six o'clock hold, while others like the idea of covering the desired point of impact with the front sight. Either method works, but based on tests I've conducted, covering the desired point of impact with the front sight is faster. This is because



you are less likely to attempt that perfect sight picture before you pull the trigger. In other words, it helps you resist target panic and holding the gun on the target too long before the trigger is pulled.

Before getting into exactly how to conduct dry-fire practice for sight alignment and trigger control, you need to demonstrate something to yourself. Adjust your laser sight so that it is visible immediately above the front sight on a target set 15 feet away. That target should have a five-inch circle kill zone properly positioned (see the [previous chapter](#)). Now, move your handgun around so that your sight picture changes, but make sure to keep the laser inside the kill zone. This will give you an idea about how imprecise the sight alignment can be and still allow you to put a bullet inside the five-inch kill zone at 15 feet. Regardless the sight picture you see, as long as the laser registered inside the five-inch kill zone, you would have gotten your hit. What should be apparent to you is that, as long as the front sight is centered on the five-inch kill zone and anywhere within the rear notch, the laser is still on the kill zone too. This is the flash sight picture you are seeking. It is the visual indicator to your finger that it is time to pull the trigger.

## SIGHT PICTURE vs IMPACT



**DISTANCE: 15 YARDS**

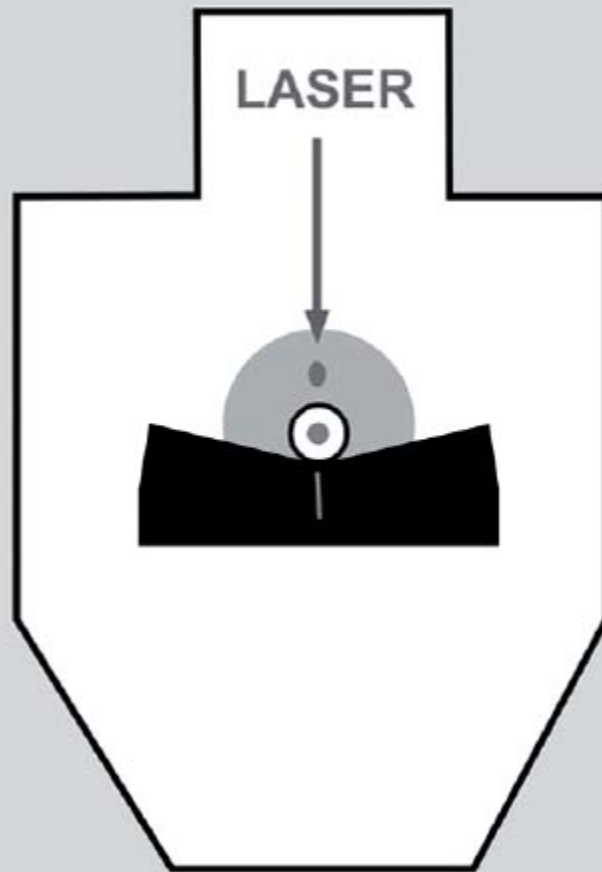
Once you have conceptualized the sight picture you need, readjust your laser so that it is on target, but about an inch higher than your sights at a distance between 10 and 15 yards. As you aim the handgun (with the sights) at the center of the five-inch circle, pull the trigger. If you do everything right, the laser should not move. If it does, you are jerking the trigger.

If the laser dot is just barely moving to the left or right, you may be using too much or too little finger on the trigger. When you can pull the trigger 20 times in a row without noticing the laser move, it's time to go to the next step.

## **TRIGGER RESET**

When learning to pull a trigger, it is important you understand trigger reset. When a trigger is pulled, it releases the hammer or striker. With a pistol, the slide will cycle and the trigger will then reset when it is let out to a certain point. With a revolver, there is no slide to cycle, but the trigger still resets as it is let out.

## LASER ADJUSTMENT



**DISTANCE: 10 - 15 YARDS**

We have previously talked about when to put your finger on the trigger, but it is just as important to know when to take your finger *off* of it. Do *not* remove your finger from the trigger until you are sure you are not going to shoot, or until your sights are no longer on the target. Once you press the trigger to the point the hammer or striker is released, keep your finger on the trigger, but relax pressure so it can move forward and reset. You will hear and feel the reset.

When you do, stop relaxing pressure on the trigger and prepare to pull it again.

Learning to work with the trigger reset helps you develop proper follow-through, keeps you from slapping the trigger when delivering multiple shots, and will improve your accuracy.

## **DRILL 2: Handgun Presentation**

Handgun presentation deals with getting the handgun out of your holster and on target. Ideally, this happens very fast. A good shooter can draw from concealment and hit a five-inch circle at five yards in about 1.5 seconds. You can, too, but it will take a great deal of practice.



- **Step 1:** To start the draw, place your hand on the gun and establish a shooting grip. Do this by placing the web of your shooting hand—the space between your index finger and thumb—at the highest part of the grip. Now, wrap your bottom three fingers around the grip and point your index (trigger) finger straight along the side of the holster. At the same time you are establishing a shooting grip, move your support hand to the

center of your torso so that your thumb is perpendicular to the ground. This positions your support hand to perfectly acquire a supporting grip on the handgun.



- **Step 2:** The next step is to pull the handgun up until it clears the holster.



- **Step 3:** Once the muzzle of the handgun clears the holster, rotate the handgun 90 degrees so that the muzzle is orientated towards the target, making sure you are squeezing the Crimson Trace Laser grip with enough force to activate the laser. The first 30 or 40 times you do this, do it while looking down at what you are doing.

If the laser is not on target, adjust the positioning of your handgun, just where it is, just above the holster, until the laser is indeed on target. Now you can proceed with presentation. If you



know your handgun is pointed towards the target, you can put your finger on the trigger. (RULE No. 3)



- **Step 4:** Move the handgun toward the target slightly, to the point where the upper part of your shooting arm is almost perpendicular to the ground and the handgun is just forward of your torso. At this point, your shooting hand should be far enough out that you can move your support hand into position without inadvertently putting it in front of the muzzle. The laser should still be on target.



- **Step 5:** Fully or almost fully extend your shooting arm, thrusting the handgun towards the target. The laser should never come off target. Once your shooting arm is extended, your support arm should be bent at the elbow and that elbow should be slightly below the elbow of your shooting arm.

By working your presentation with the laser, you avoid two common mistake shooters make during the draw stroke. One is “bowling,” bringing the handgun out in a long and low sweeping motion as you would if you were bowling. The other is “fishing,”

pulling the muzzle of the handgun up and then down onto the target like you would if you were casting a fishing pole.

Work through the presentation about 30 to 40 times while watching what you are doing. Go slowly and make sure you are correctly performing each step. Then you can do the exercise by looking at nothing but the target. Continue to go slowly, focusing solely on the target, the laser dot, and on bringing the sights up to your eyes. Once you refine your sight alignment, you can holster your handgun. You might consider videoing your practice sessions so that you can see, first hand, the mistakes you are making.

This is a good time to discuss holstering a handgun. Many firearms-related accidents occur during holstering because shooters disregard Rule No. 3.

## **HOLSTERING**

Holstering is done in reverse of presenting the gun.

- **Step 1: Remove your finger from the trigger and place it straight alongside the handgun.**
- **Step 2: Pull the handgun back until your upper shooting arm is perpendicular to the ground.**
- **Step 3: Replace your support hand back at the center of your torso with your thumb pointing skyward.**
- **Step 4: Rotate the handgun until the muzzle is pointed down, towards the holster.**
- **Step 5: Slowly, gently, guide the handgun back into the holster and secure.**

Watch yourself holster the first 50 or so times you try it to make sure you *never* try to holster with your finger on the trigger. Remember, if the laser (sights) is not on the target, your finger should not be on the trigger. (RULE No. 3)

Ideally, before you ever draw and fire a loaded handgun, you should have practiced dry presentation at least 500 times or about 15 minutes each evening for a week.

## **DRILL 3: Reloading**

Dry-reloading practice gives you an opportunity to make mistakes and drop things while working with an unloaded handgun. There are a variety of schools of thought, when it comes to reloading a handgun. Almost everyone agrees that a combat reload is when you have run your handgun empty and need to get more rounds in it in a hurry. The other is the tactical reload, which some argue should only be done after the fight is over, while others say it should be done at any time there is a lull in the fight.

At the risk of oversimplifying the subject, I don't subscribe to the tactical reload for most civilian gun owners looking to carry a handgun for personal protection. I have two reasons for this.

One, I'm not sure how you can define a "lull in the fight." Sure, hypothetically we can come up with all sorts of scenarios that might constitute a "lull," but for someone who doesn't train on a weekly basis, the KISS (Keep It Stupid Simple) principle wins out.

Second, conducting a tactical reload for a semi-automatic handgun requires a good bit of dexterity and nimbleness, something you may not have under extreme stress. In an effort to conduct a tactical reload, you might end up dropping stuff and/or not having a

loaded gun at the precise moment you need one. So, for our purposes here, we will cover a speed/combat reload. Once you have mastered the drills in this book, you'll have a better understanding of how a defensive handgun works. As your learning continues, consider the benefits of a tactical reload and decide, on your own, if it is something you feel will enhance your survival.

### **WHEN DO YOU RELOAD? (RULE NO. 10)**

1. When you know you are out of ammo.
2. When you think you are out of ammo.
3. When you know you have less than 50 percent of your available load in the handgun.



**Never eject the magazine in your handgun until you have secured a new, loaded magazine in your support hand.**



**A reload should be conducted close to your body—in your work space—where you have the most control of the handgun.**

## **HOW DO YOU RELOAD?**

With a semi-automatic handgun, you pull the gun in to your body so it is about a forearm's length away from your chest and so that the muzzle is just below your line of sight with your target. At the same time, your support arm is reaching for your spare magazine. When you have your spare magazine in your support hand, depress

the magazine release on your handgun, let the ejected magazine fall free, and then shove the new magazine in.

From a tactical standpoint, you are now at a crossroads. If the slide was locked to the rear because you had fired your last shot, you will need to either reach across the top of the handgun with your support hand and pull the slide to the rear and release it, or you can depress the slide stop with the thumb of either the support or shooting hand (yet another set of skills that can be accommodated with practice). Either way will chamber a live cartridge. As you are positioning the handgun for this operation, bring your gun back down to the position of Step 3 of the presentation so that you can reposition the sights/laser on the target. After the slide goes forward, you can then reengage or assess.

But what if the slide wasn't locked back when you started your reload? This would suggest there is a live cartridge in the pistol's chamber, but it could also mean the slide failed to lock back after the last round in the magazine was fired. The latter happens, even with guns with which it has never happened before, and most often when you really need it to not happen. So, do you cycle the slide to chamber a new cartridge from the new magazine, or do you hope there's still one in the gun and continue the fight?

That's a good question. From a tactical/training standpoint, it makes sense to do the same thing the same way every time. This means that immediately after inserting a fresh magazine, you should always cycle the slide. If this causes a live round to be ejected out of the handgun, so be it. If the slide had failed to lock back on an empty chamber and you attempt to reengage the target, you will hear a click and will have to execute immediate action before you



can fire. Nothing is louder than the click of an empty gun when you really need to hear a bang.

Which approach is right? Both. Pick a method and stick with it.

For a revolver, the reload is a bit more complex. Bring the handgun back to you just as you would with a semi-automatic, but then place your left hand on the opposite side—the right side—of the revolver so that your two middle fingers are on the cylinder. Then, activate the cylinder release with your strong hand as you push the cylinder out with the middle fingers on your left hand.

Once the cylinder is free of the revolver, release the grip with your right hand and use it to slap the ejector rod, forcing the empty cases out and onto the ground. Now, grab a speedloader or speed strip with your strong hand, insert the cartridges into the cylinder, and then close the cylinder with the thumb of your left hand. The revolver is now reloaded and you can reestablish your two-hand grip to continue the fight.



**When you slap the ejector rod on a revolver to unload it, do it like you mean it—*forcibly* eject the empty cases.**

For left-handed shooters, you will reload a revolver like you were right-handed. The first step is to transfer the revolver from your left hand to your right hand and then continue the reload as you would if you were right-handed.

You can dry-fire practice a reload just like it has been described, but it is much easier and safer to do with dummy rounds. They will allow the slide to function and will work just fine with speedloaders. Do this 20 times each day for a week before you try it with live ammunition.

## **PUTTING IT ALL TOGETHER**

After a week of conducting dry-fire practice of each of these individual aspects of weaponcraft, try putting it all together. Present the handgun to the target, find your sight alignment and manipulate the trigger, and then conduct a reload, present to target, find the sights, and work the trigger. Obviously, this is dry-fire practice, so conducting a reload means simulating a reload or reloading using dummy rounds.

## **DRILL 4: Immediate Action**

Perform immediate action (clear a malfunction). When shooting a handgun, malfunctions can occur in a variety of ways. It is important you identify the type of malfunction you have and respond accordingly. The procedure is the same with all pistols and all revolvers.

## PISTOL

- **Failure to Fire:** The most common malfunction with a pistol is failure to fire. You have worked the trigger mechanism, but there was no bang. Most often the cause is that there was no cartridge in the chamber due to a magazine that was not fully seated when the slide cycled. The proper response is to maintain your firing grip while the palm of the support hand strikes the base of the magazine. Next, cycle the slide as when loading and continue to engage as necessary.

- **Failure to Eject:** An indicator that you have a failure to eject is that the trigger will not function. Failures to eject can occur because of a dirty pistol, ejector or extractor failure, or an underpowered cartridge. The proper response is the same as with a failure to fire, except that, when you cycle the slide, you should roll the pistol to the right so that the cartridge case that failed to eject can benefit from gravity and fall clear of the pistol. Once complete, continue to engage as necessary.

- **Double Feed:** A double feed is where one cartridge is in the chamber and the slide of the pistol is trying to force another cartridge in there with it. Both will not fit, of course, and the gun becomes what some will call “jammed.” Indications are a trigger that will not operate and a slide that will not fully cycle. The proper response, from a purely mechanical standpoint, is to lock the slide to the rear, strip out the magazine, briskly hand-cycle the slide multiple times, and then reload. Tactically speaking, you should immediately seek cover and transition to a loaded weapon.



**Using a speedloader or speed strip, insert the cartridges into the cylinder chambers and then drop the loading device.**

## **REVOLVER**

- **Failure to Fire:** If a revolver fails to fire after the trigger has been cycled, this is generally an indication that all the cartridges in the cylinder have been expended or there is a dud. Immediate action with a revolver that fails to fire is to pull the trigger again. If the trigger functions properly but the revolver still does not fire, reload.

If attempts to pull the trigger are unsuccessful, there is a high probability the cylinder has become obstructed. From a purely mechanical standpoint, you will need to attempt to discover the source of the obstruction, which could be debris lodged in the cylinder or a bullet that has been partially released from a cartridge case and is fouling the mechanism. Regardless, this is a time-consuming situation to resolve. Tactically speaking, if a revolver's

trigger is locked up, it is time to find cover and transition to another loaded firearm.

- **Failure to Eject:** There are two ways failed ejection can occur with a revolver. Due to dirt or over-pressured cartridges, cartridge cases can become stuck in the cylinder chambers. If you have slapped the ejector rod and it does not depress, slap it again, harder. The result will be one of three situations: all the cartridges will be ejected, the ejector rod will not move and no cases will be ejected, or some cases will be ejected and some will become lodged under the extractor star. In the case of the former, reload and continue to engage as necessary. In the case of the latter two, seek cover and transition to another loaded firearm, because you have a problem that is not readily correctable.

## Chapter 16

# Live-Fire Practice

*There should be a hit in the kill zone for every empty case on the ground.*

**F**or each training drill, you will find separate sections that deal with various aspects of the drill. These sections include “Purpose,” “Resources,” “Method,” “Goals,” “Notes,” and “Remedial Training.”

In the “Purpose” section, the learning point of each drill is supposed to convey will be identified. Under “Resources,” you will find the items needed to conduct the drill. The manner in which each drill is to be conducted will be explained in the “Method” section. The level of proficiency you should reach with each drill is identified under the “Goals” section, while “Notes” will address subtle nuances of the drill with regards to your performance, as well as specific tools like lights, lasers, and sights that might be used. Finally, at the end of each drill, “Remedial Training” will address those who find they cannot perform the drill to standard.

One thing’s for sure, we all learn differently. What one person can learn by reading and trying, another must have demonstrated. If at any point during this training you hit a wall and simply cannot advance, seek guidance from someone who has become established as a firearms trainer of good repute.

New shooters or shooters initially learning how to shoot a defensive handgun should limit practice sessions to about 50 to 100 rounds per range visit, This is especially true if you can only visit the range about once per month. If you can go to the range once every two weeks or more, and if you do not experience any physical strain, you can up the round count per training session to 150 or maybe even 200. It is imperative you do not overstress your body, eyes, or patience. If you do, you will quickly see diminishing returns on the targets.

It is highly advisable you first run each drill with the laser sight, then transition to open sights. You will learn doing both, and the application of the secret is the same. The laser should be your primary sight, because it is faster. However, you may not see the laser, your grip may not activate the laser, and it is also possible the battery might go dead. As your handgun presentation skills advance, you will start seeing the laser on target before the handgun comes to eye level. If at any time you fail to see the laser prior to the sights coming into your vision, you should automatically default to the open sights.

Once you can perform each drill to standard, have a shooting partner intermittently turn off the master power switch on your laser without telling you. Then, when you present your handgun to the target, you'll be looking for the laser that's not there and will default to the sights. This will condition you to look for the laser on target before your handgun is presented to the target in a manner in which you can use the sights. It will also teach you to begin the reason.



As with all training, start slowly and work on getting hits without speed. Speed comes with time and smoothness.

As you advance to live-fire, another important tactical consideration that should be addressed is scanning. Scanning—looking to the left and right after you engage a target—has become the *en vogue* thing to do on the range. On its face, it makes sense; in a real defensive situation, you best be looking around your 360 degrees before you holster up. When it gets bad, it generally gets bad all over.



The problem on the range is that we are never looking for something that might actually be there. We're merely moving our heads from left to right, *acting* like we're looking for something, but knowing it isn't there. It's kinda like looking at your mother-in-law when she's talking. You're looking, but you ain't seeing nothing. We fight the way we train. The worst thing we could train to do is to turn our head this way and that and not actually look. So we have to ask, are we building a conditioned response that is prudent in theory, but reckless in reality?

The solution is really simple, but one that's difficult to facilitate on your own. We need to scan, but we need to do so and sometimes see things that drive different reactions. Additionally, where is the common sense in standing still? Yeah, you shoot more accurately when you're still, but when you're done shooting and start the accessing process, you should also be moving.

If we are conducting drills to improve our gun handling and marksmanship skills, then let's do that. No reason to muddle the waters with a reckless, conditioned response. Our brain is smart enough to figure out that, when I look left and right, I'm not going to see anything I need to address, so there's no reason to twist my head except for fear a range officer will fuss at me. With no possibility of seeing something that will dictate a different response, scanning is about as meaningful a politician's promise.

Short of pop-up shoot/no-shoot targets, with just a little creativity you could position targets to the left and right with numbers or colors on them. A training partner could call out a color or number immediately after you engage the primary threat. Then you could

“scan” for that color or number and react as needed when and if you see it.

What if you don’t have a training partner? Well, you need something else to look for. Gunsite instructor Dave Starin gave me a good idea. After you engage a target and consider the target neutralized, look around, *with your handgun following your eyes*, for something. What kind of something? Well, that depends on where you are. Look for other targets, bugs, empty cases down range, red leaves, flowers, zombies. It really doesn’t matter. Look for *something*.

If you don’t see what you’re looking for, proceed as the training situation dictates. If you do see what you’re looking for, then have a predetermined reaction. You could say, “Bang” or “Stop” or you could just mentally acknowledge that you have searched your immediate area and did not see what you were looking for.

Granted, this is not as good as the possibility of having additional targets that may need to be engaged, but it is better than just wiggling your head from side to side so that you look cool. Once you progress to the point of working from the holster, start incorporating scanning into your training. As you become more proficient with your handgun, consider adding movement to cover, too.

## Where to Shoot

Where do you live-fire practice? This can be problematic in some locations, though shooting ranges exist within driving distance of most folks. If one is not close, you very likely live out in the sticks like me and can find an alternate location close to home. Even if a shooting range is close by, they may have restrictions about drawing

from the holster and about what targets you can shoot. This is all the more reason to maybe join a local club or find a more agreeable location where you can shoot.

Farmers can be a good resource. Offer to help out a day here and there on the farm, barter, trade, whatever it takes. You may even find someone with property who likes to shoot, too. I live on 50 acres and have a 150-yard range 20 yards from my side door. Granted, not everyone has this convenience, but, with a little work and digging, you should be able to find a suitable makeshift range. Regardless of where you shoot, make sure you have a dependable backstop and always be sure of your target and what is beyond.  
(RULE No. 4)

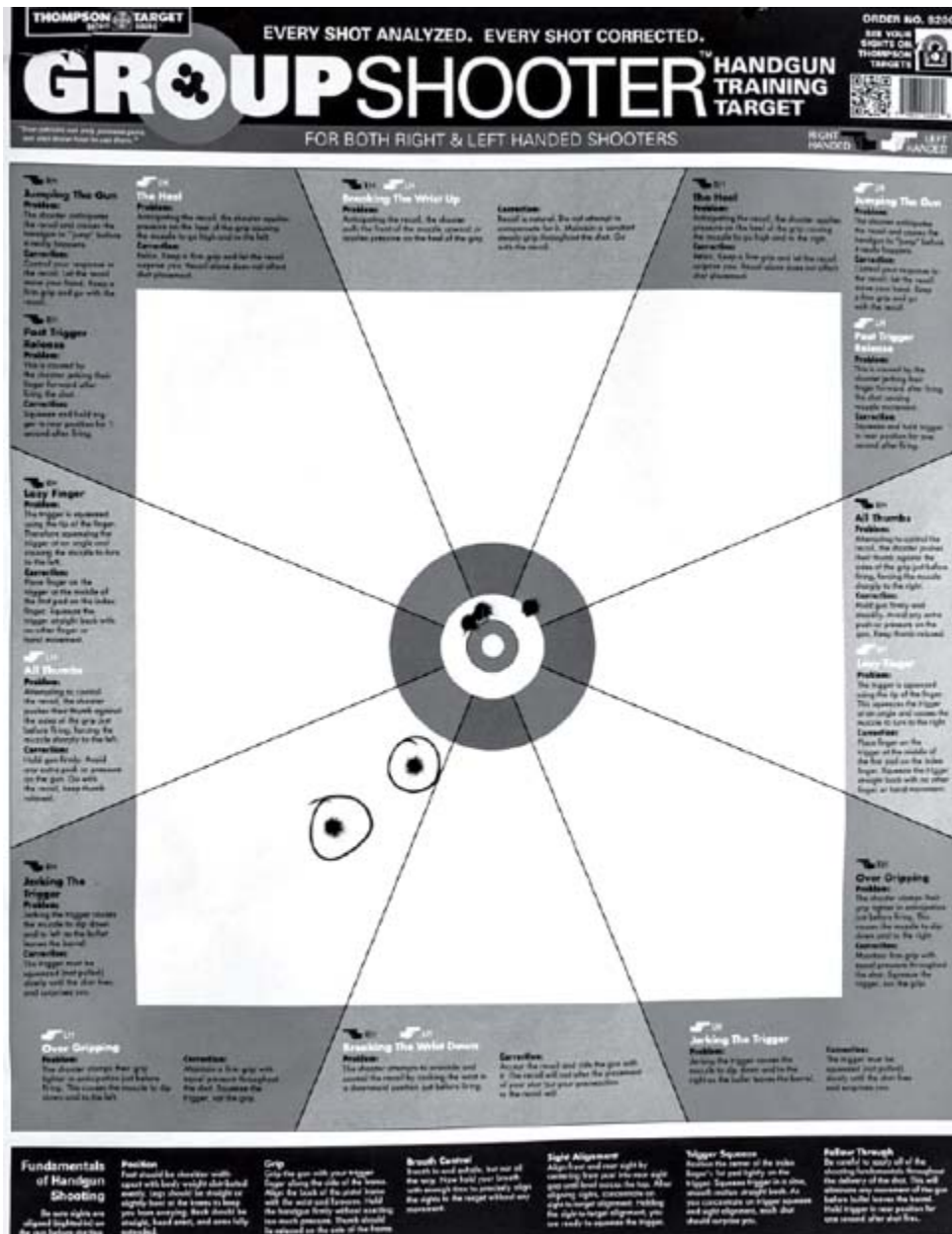
## **Diagnosing Point of Bullet Impact on Target**

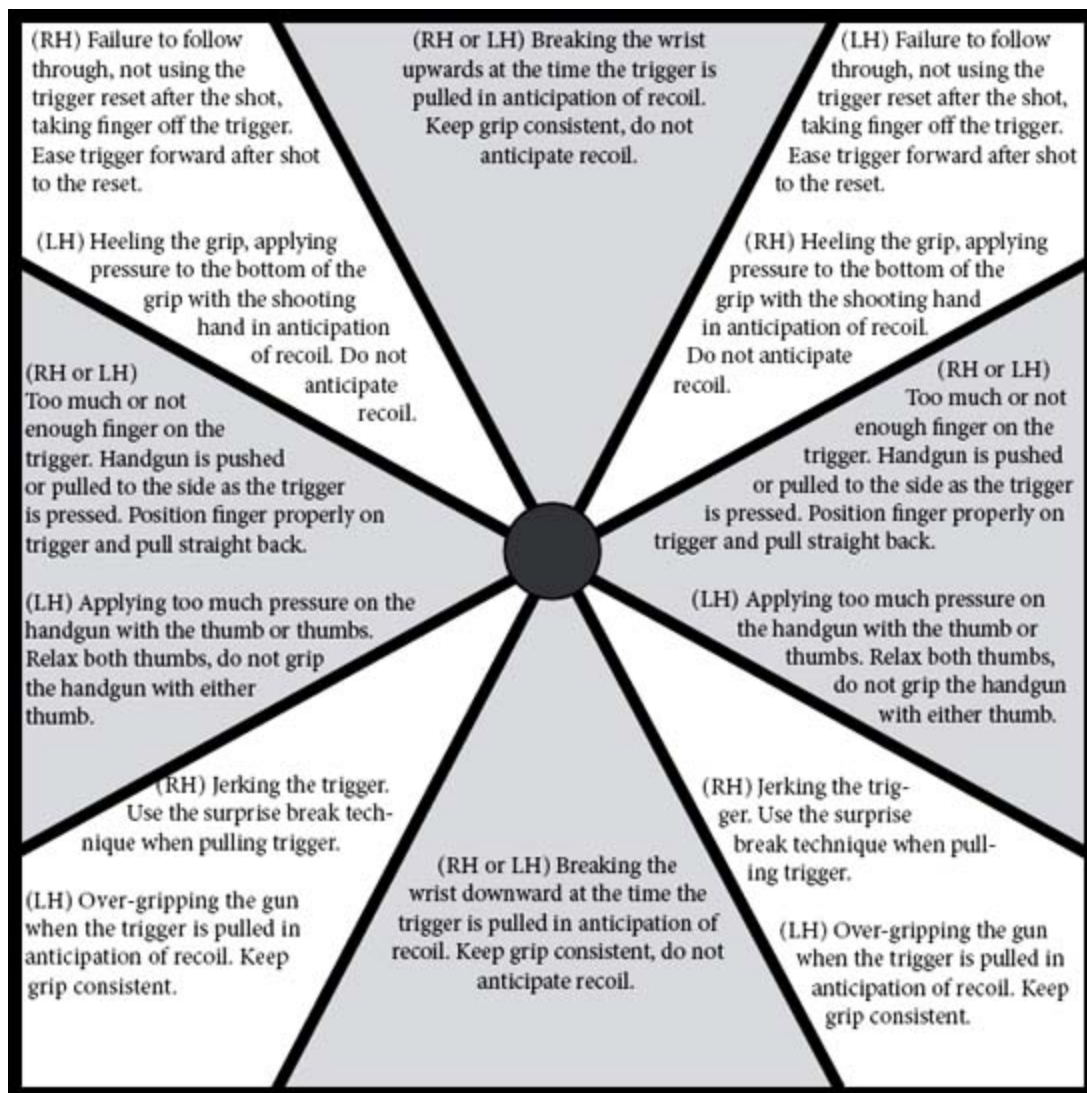
Just because you have the sights lined up on target properly when you pull the trigger does not mean the bullet will strike that point. In [Chapter 3](#) we discussed the flash sight picture. In [Chapter 15](#) we discussed two different sight pictures and what they should look like on target. We also showed how slight variations in sight picture can affect point of impact. The diagram below repeats that lesson.

Still, there are other reasons your bullets may not strike the target at your point of aim. Maybe the sights are not properly adjusted. This was discussed in [Chapter 4](#). There can be yet another problem and that is what you are doing with the handgun at the exact moment the trigger breaks.

For example; if you are a right handed shooter and you are jerking the trigger, your shots will likely land low and to the left of your point of aim. If you are doing this and you are a left handed

shooter, your shots will most likely land low and to the right of your point of aim. The Group Shooter Target from Thompson Target which is shown on the next page outlines some of the common mistakes and offers corrective action. You can shoot at this target if you are having problems, or alternatively, just compare it to your shots on any target when trying to diagnose a bad shot.





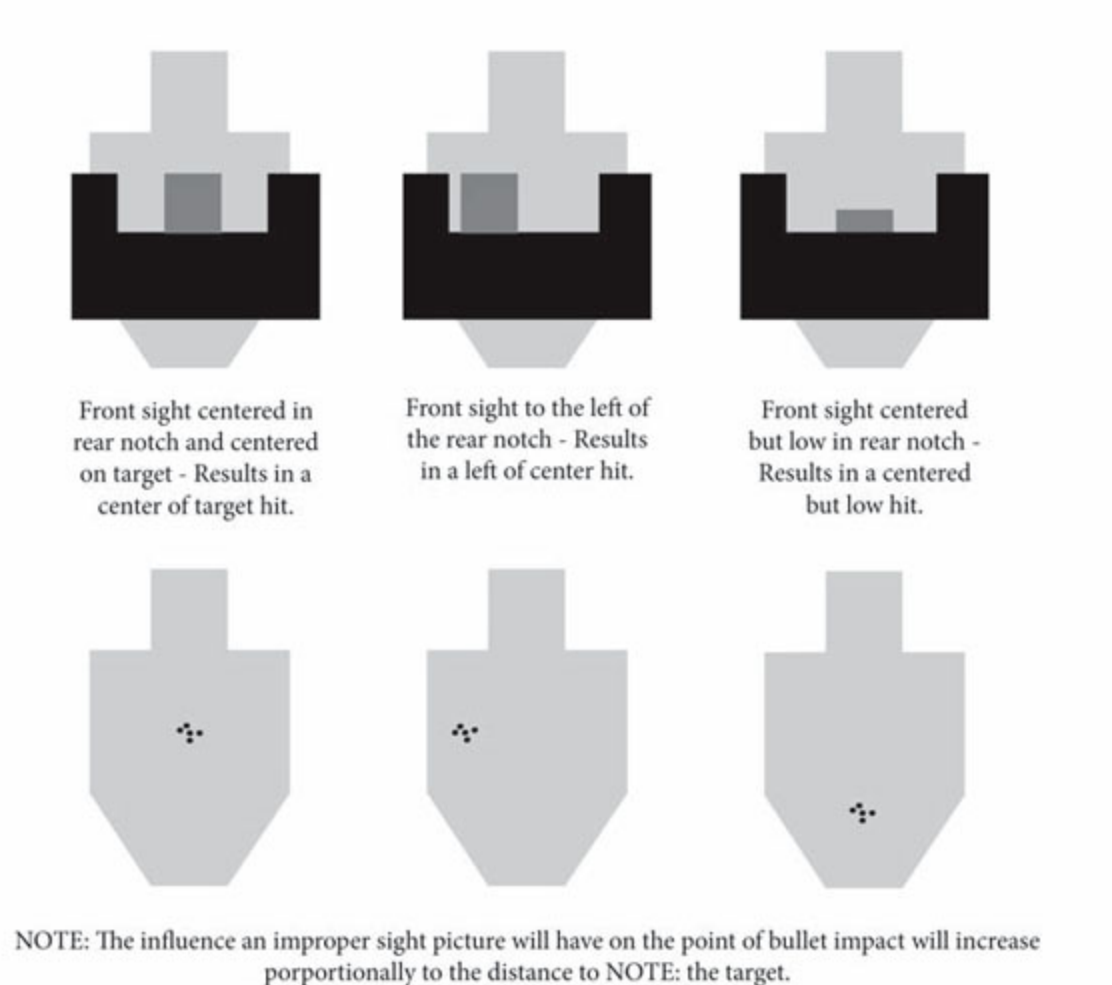
By looking at the Thompson Target Group Shooter Target we can see that the two circled shots landed low and left of the point of aim. According to the diagnosis on the target, if the shooter was right handed, they were likely jerking the trigger.

If the shooter was left handed, it is likely that they were pushing the gun with their thumb at the time the shot broke.

This target should only be used as a guide. It is possible that shots landing anywhere other than the center or point of aim did so for multiple reasons. And it could be as simple as not

**maintaining the proper sight picture throughout the trigger press. Remember the secret?**

## UNDERSTANDING SIGHT PICTURE & POINT OF IMPACT RESULT



## LIVE-FIRE DRILL 1: SINGLE SHOTS

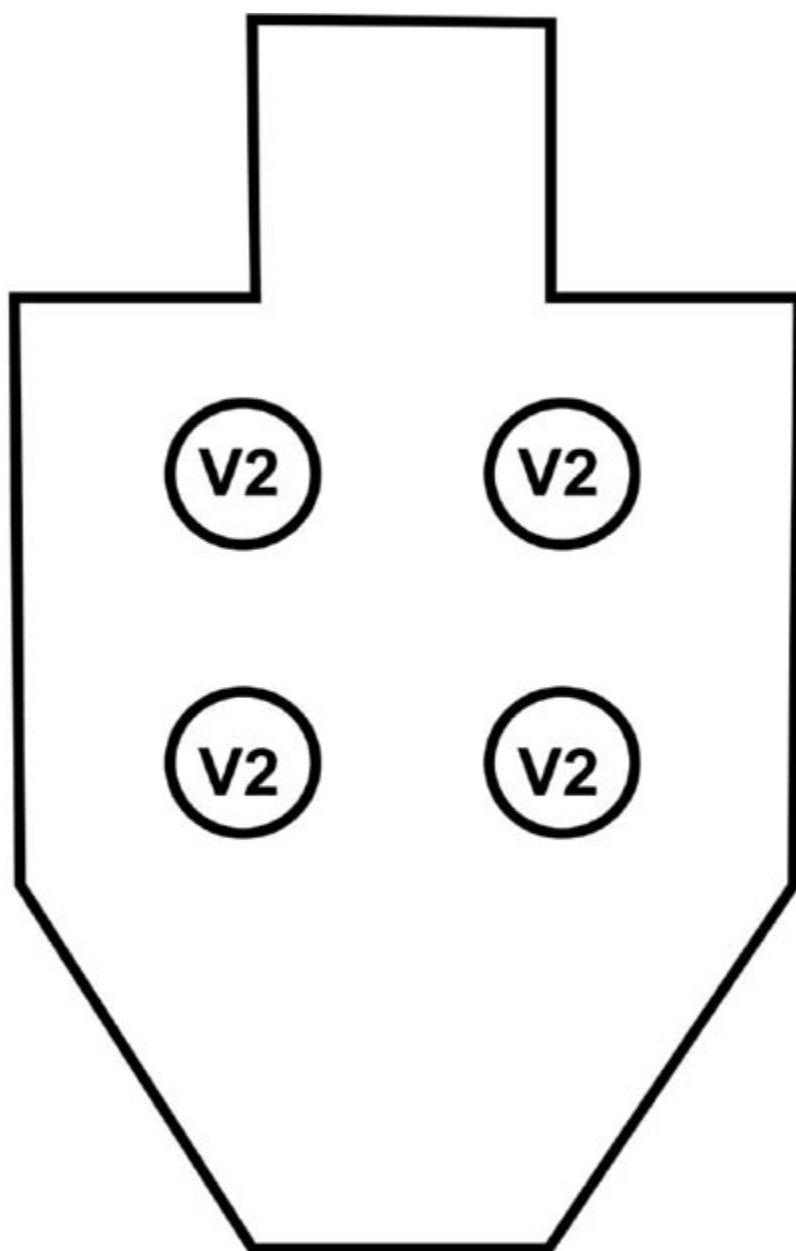
**Purpose:** Develop your ability to maintain proper sight alignment while operating the trigger and to further improve your control and operation of the handgun. Conditions your reflexes to deal with noise and recoil.

**Resources:** Handgun with laser grips, 10 to 40 rounds of ammunition, target with four V2 zones (as shown opposite).

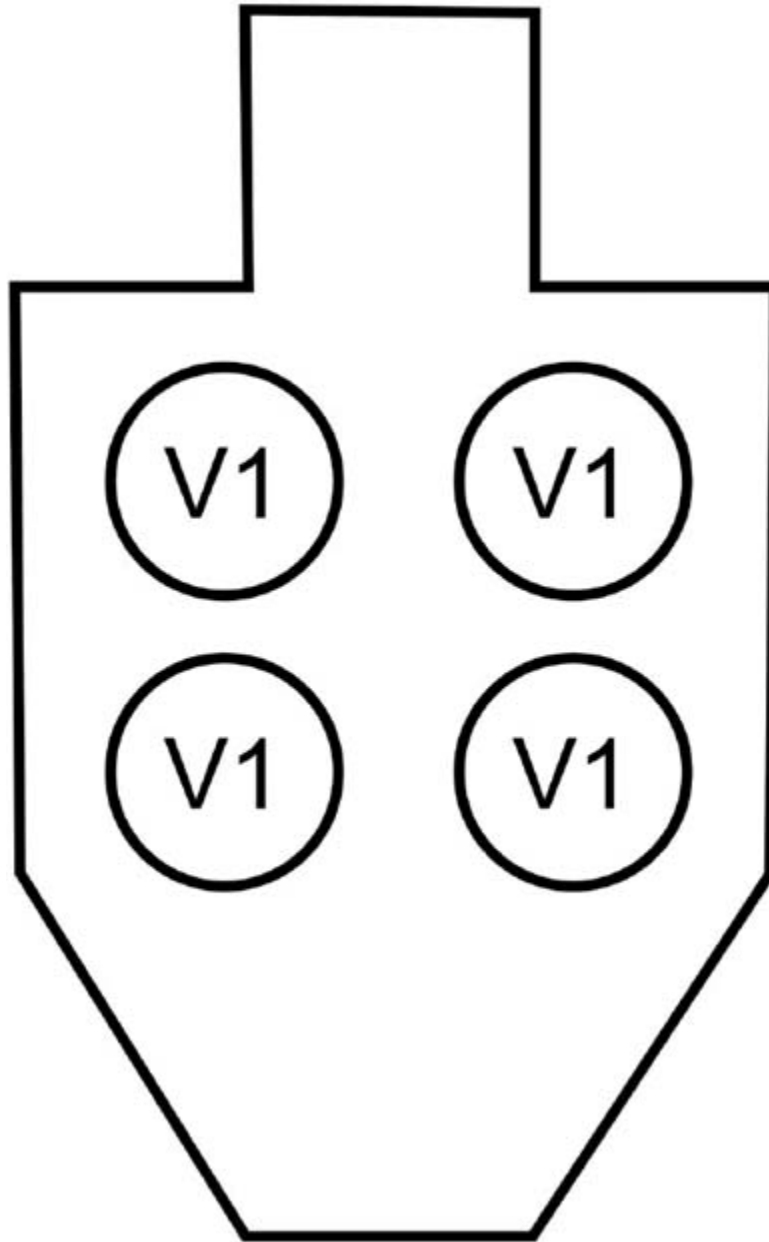
**Method:** Position the target at five yards. Load one round in your pistol or revolver. Start with your handgun at the low- or laser-ready position and then slowly complete your presentation (draw stroke), aligning the sights on one of the V2 zones, and fire one shot. Repeat nine times, loading and firing one shot at a time at the same V2 zone.

**Goal:** Ten hits in the V2 zone with 10 shots. If you miss with more than half the shots, cut the distance to three yards and repeat. Once you can successfully complete the drill at three yards, move back to five yards. If you miss only one or two times out of 10 shots at five yards, repeat the exercise at five yards until you complete to standard.

**Notes:** Instead of using a target with a single V2 zone in the head, paint four V2 zones on a single silhouette target. After you can shoot this drill to standard, you should also practice this drill with a handheld light using any one of the flashlight shooting techniques explained in [Chapter 10](#). However, it is suggested you become proficient in the performance of this drill without a flashlight before it is included into your training regime. Also, remember trigger reset. After you fire that single shot, follow through, keeping the trigger depressed, then slowly let it out to the reset position before you prepare for the next shot.







**Remedial Training:** If after four attempts you are still unsuccessful, go back to the dry-practice training segment on sight alignment and trigger control. Often, when shooters begin live-fire, they'll find recoil and muzzle blast quickly induces a flinch. If you are one of these *normal* people, as soon as you notice your shots hitting low, stop and conduct about five minutes of dry-practice,

working on sight alignment and trigger control. Then, return to this drill and repeat.

## **LIVE-FIRE DRILL 2: CONTROLLED PAIRS/DOUBLE-TAPS**

**Purpose:** Develop your ability to establish and regain proper sight alignment while operating the trigger during multiple shots, and to further improve your control and operation of the handgun.

**Resources:** Handgun with laser grips, 10 to 40 rounds of ammunition, target with four V1 zones (as shown opposite).

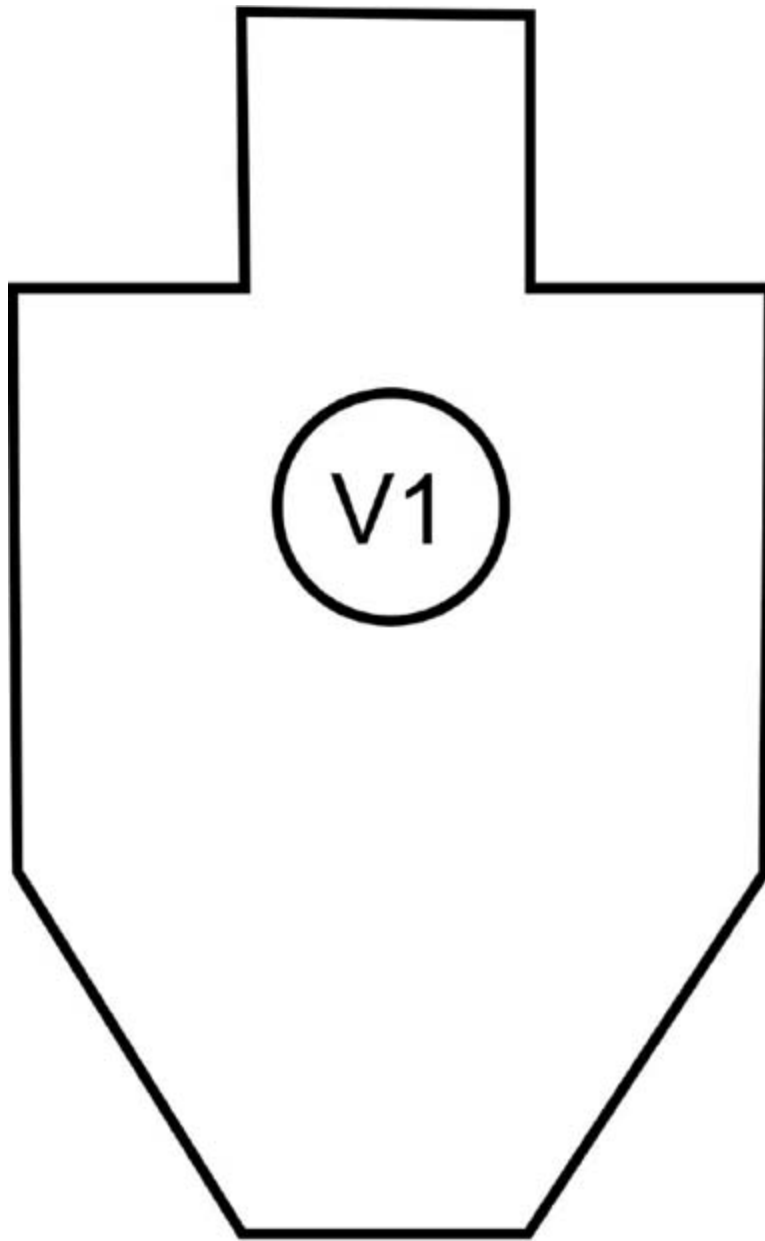
**Method:** Position the target at five yards. Load two rounds in your pistol or revolver. Start with your handgun at the low- or laser-ready position and then slowly complete your presentation (draw stroke), aligning the sights on one of the V1 zones, and fire two shots. Repeat five times, loading and firing two shots at a time at the same V1 zone.

**Goal:** Ten hits with 10 shots. If you miss with more than half your shots, cut the distance to three yards and repeat. If you miss only with one or two shots, repeat the exercise at five yards until you can perform to standard.

**Notes:** The common failing most shooters have with this exercise is jerking the trigger on the second shot, because they are trying to shoot too fast. If you notice your second shots are hitting low, slow down and concentrate a wee bit longer before breaking that second shot. Remember, you're still learning, and the surprise break technique will work for you. You probably still have a long way to go to get to that five-thousandth repetition.

How fast should you shoot, or how soon after the first shot should you fire the second? Ideally, you will fire the second shot as soon as you see the flash sight picture on the target. You should also practice this drill with a handheld light using any one of the flashlight shooting techniques explained in [Chapter 10](#). However, it is suggested you become proficient in the performance of this drill without a flashlight before it is included into your training regime.

Here you will start to really appreciate the value of resetting the trigger. Once you trigger the first shot, work the trigger to the reset position during recoil, but never remove your finger from the trigger. When you get back on target, the trigger should be reset for the next press.



**Remedial Training:** If after four attempts you are still unsuccessful, go back to the dry-practice training segment on sight alignment and trigger control. Try moving the laser across the target and breaking the shot when you get to a pre-determined point. When this is working smoothly for you and you are not jerking the trigger, repeat Live-Fire Drill 1 and then return to this drill.

## LIVE-FIRE DRILL 3: SINGLE SHOTS FROM THE HOLSTER

**Purpose:** Develop your ability to conduct a smooth presentation and follow the presentation up with hit on a target.

**Resources:** Handgun with laser grips, 10 to 40 rounds of ammunition, holster, target with a single V1 zone (as shown opposite), shot timer.

**Method:** Start with a V1 zone target placed at five yards, and a fully loaded handgun. Draw the handgun and fire one shot on the signal from the shot timer.

**Goal:** Draw and get a hit in a V1 zone at five yards in three seconds, five times in a row.

**Notes:** During your first attempts at this drill, it is imperative that you do *not* see how fast you can go, but see how long it takes you to draw and get a hit. It matters not if it takes 10 seconds or a minute. Repeat this exercise, increasing the speed gradually until you miss. Remember to look for the flash sight picture and concentrate on trigger manipulation. You are likely to find you are much better at this drill when you use the laser as a sight, as opposed to the pistol's sights. Repeat the drill over and over, gently bumping your speed along until you miss. At that point, back off a bit on speed and gradually work up the speed again, with the ultimate goal of getting a hit within three seconds.

Once you can perform this drill to standard, integrate the use of a handheld flashlight. For most shooters, this adds considerably to the time needed to complete this drill, so you should adjust your goal or par time by an additional second. Use any one of the flashlight shooting techniques explained in [Chapter 10](#).

**Remedial Training:** If you cannot hit the V1 zone five times in a row within four seconds, firing a single shot at a time, you need to work on both presentation and single shots without drawing from the holster. If you are getting hits but cannot complete the drill within three seconds, don't worry, simply keep practicing. This is called training, and it may take as many as 50 to 100 attempts at this drill to reach that level of proficiency. Between visits to the range, remember to work on dry-practice.

## **LIVE-FIRE DRILL 4: DOUBLES FROM THE HOLSTER**

**Purpose:** Develop your ability to conduct a smooth presentation and follow up the presentation with two fast hits on a target.

**Resources:** Handgun with laser grips, 10 to 40 rounds of ammunition, holster, target with a single V1 zone (as shown opposite), shot timer.

**Method:** Start with a V1 zone target placed at five yards and an even number of rounds loaded in your handgun. Draw the handgun and fire two shots on signal from the shot timer.

**Goal:** Draw and get two hits in a V1 Zone at five yards in 3.5 seconds, five times in a row.

**Notes:** Most often, shooters have trouble with this exercise because they rush the first shot and/or jerk the trigger on the second shot, because they are trying to shoot too fast. If you notice your second shots are hitting low, slow down and concentrate a split second longer before breaking that second shot. Remember, you're still learning, and the surprise break technique will work for you. You're still way short of that five-thousandth repetition. How fast

should you shoot, or how soon after the first shot should you fire the second? Just as with Live-Fire Drill 2, ideally you will fire the second shot as soon as you see the flash sight picture on the target.

Once you can perform this drill to standard, integrate the use of a handheld flashlight. For most shooters, this adds considerably to the time needed to complete this drill, so you should adjust your goal or par time by an additional second. Use any one of the flashlight shooting techniques explained in [Chapter 10](#).

**Remedial Training:** If after four attempts you are still unsuccessful, go back to Live-Fire Drill 2 and work with it until you can again meet the standard. You're now incorporating a number of elements into your shooting, and it's critical you remember to apply the secret.

## LIVE-FIRE DRILL 5: TARGET FOCUS SHOOTING

**Purpose:** Develop your ability to bring the handgun up on target and get V1 zone hits without ever bringing the front sight in to full focus.

**Resources:** Handgun with laser grips, 10 to 40 rounds of ammunition, target with a single V1 zone (as shown opposite), shot timer.

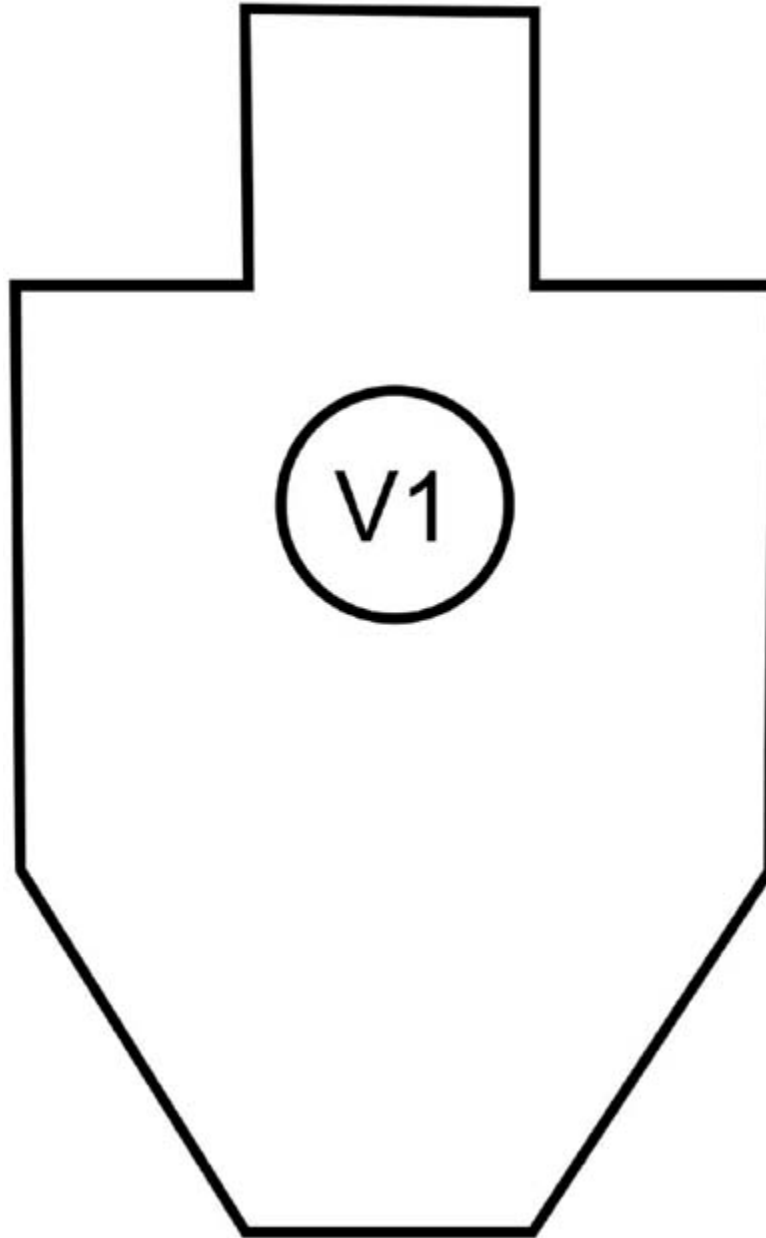
**Method:** Place a V1 zone target at three yards. On a signal from the shot timer, draw and fire one round into the V1 zone by using the handgun-mounted laser or by seeing the out-of-focus sight hover over the target.

**Goal:** Draw from the holster and hit a V1 zone once within 1.5 seconds at three yards. Repeat four times.

**Notes:** Target focus shooting is best performed when the target is clearly visible without the aid of illumination. A laser is the best tool for target focus shooting, while express sights are the next best option. You will find this type shooting difficult if your handgun is fitted with standard, notch-and-post sights.

**Remedial Training:** If you are successful at all with target focus shooting, you have probably noticed you have already been kind of doing it in the previous drills. This will be, without a doubt, the case if you have been working with a handgun-mounted laser. If you are struggling with this technique and using standard or express-style sights, be patient. As you approach the five-thousandth repetition of pointing a handgun at a target and aligning the sights, it will start to come to you almost naturally.





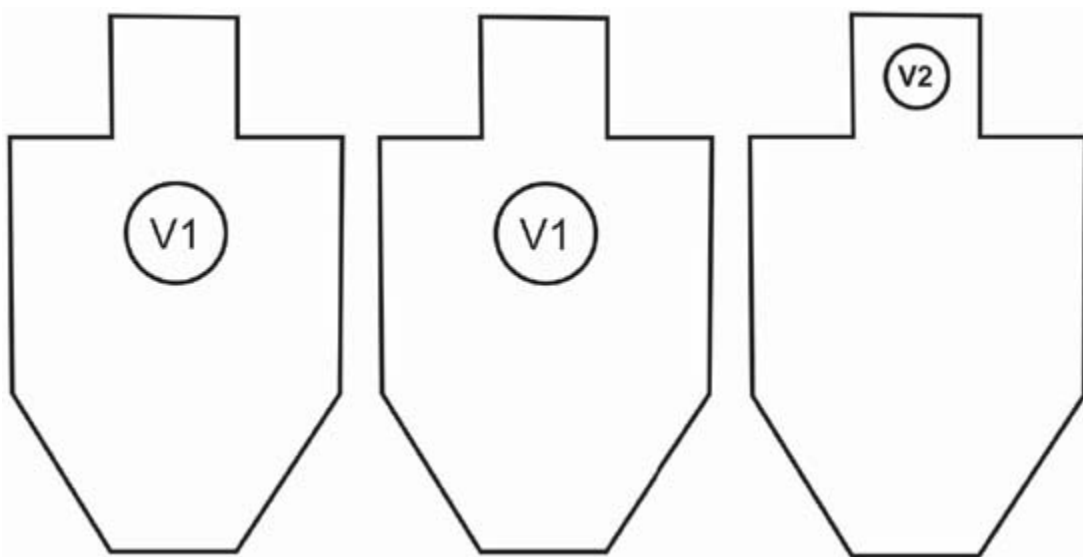
## **LIVE-FIRE DRILL 6: MULTIPLE TARGETS**

**Purpose:** Enables you to engage multiple targets without hesitation and to adjust your shot cadence as range increases and target size decreases.

**Resources:** Handgun with laser grips, 40 rounds of ammunition, holster, shot timer, two targets with V1 zones and one target with a

V2 zone (as shown on these two pages).

**Method:** Position a V1 single-zone target at three yards, a duplicate V1 single-zone target at five yards, and place the V2 zone target at seven yards. The targets should be spaced about three yards apart. On a signal from the shot timer, draw and engage the V1 zone of the three-yard target with two shots, the V1 zone of the five-yard target with two shots, and the V2 Zone of the seven-yard target with one shot.



**Goal:** Starting with the handgun in the holster, obtain two hits on both V1 zones at three and five yards and one hit on the V2 Zone at seven yards within eight seconds.

**Notes:** This drill gives you your first real chance to incorporate all three sighting methods of shooting: target focus, flash sight picture, and deliberate aim. You can target-focus shoot the three-yard target, engage the five-yard target with a flash sight picture, and apply deliberate aim on the seven-yard V2 Zone. Alternately, you can engage all three targets using the laser and the target focus method.

As you work through this drill, experiment with each sighting technique to discover how it impacts your speed and accuracy.

Once you can perform this drill to standard, integrate the use of a handheld flashlight. For most shooters, this adds considerably to the time needed to complete this drill, so you should adjust your goal or par time by an additional second or second and a half. Use any one of the flashlight shooting techniques explained in [Chapter 10](#).

Another advanced step to this drill would be to integrate a reload and re-shoot. In other words, after you have fired the drill, immediately conduct a reload and repeat the drill. Initially, this will more than double your time to complete the drill.

**Remedial Training:** At this point in your training, you are starting to combine all the skills you have previously mastered. The key to identifying the necessary remedial training is in being able to diagnose your shortcomings accurately. If you are seeing your second shots on the targets at three and five yards impact low, you are jerking the trigger and/or rushing your double-taps/controlled pairs. If your first shots on the five-yard targets are hitting wide, you are pushing the handgun too fast as you conduct the target transition. Experience has shown the hardest hit to obtain in this drill is the V2 Zone hit on the seven-yard target. This is most often due to the fact that, after firing two double-taps, your brain does not get the “slow down and aim” message to your finger for the head shot at the longer distance. You should revert to the drills that are similar to the problems you’re experiencing.

## **LIVE-FIRE DRILL 7: UNCONVENTIONAL POSITIONS**

**Purpose:** Increase the likelihood you will be able to obtain V1 zone hits on targets you may have to engage from weird and unconventional positions.

**Resources:** Handgun with holster and laser grips, 10 to 40 rounds of ammunition, target with a single V1 zone (as shown opposite).

**Method:** Work without the constraints of time on drawing your handgun and engaging targets from positions other than those from which you would normally fire your handgun. The distance to targets should be between three and seven yards.

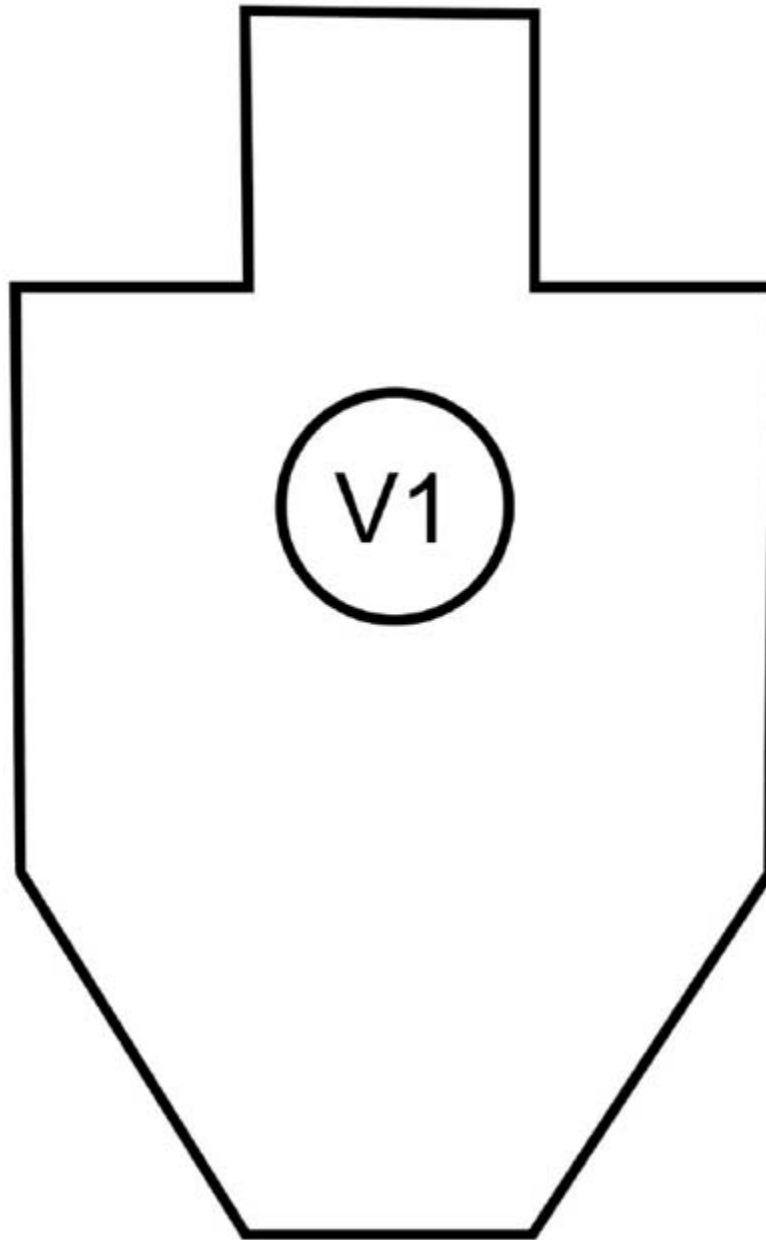
1. **Sitting Forward**—Start sitting, facing a target. This is the easiest of the unconventional positions to shoot from. Draw and engage the target as normal. You may find it helpful to position your feet not straight in front of you, but similar to how you position them when you are shooting from the standing position.

2. **Sitting Right**—This could replicate shooting through the passenger window of your car. For this drill, you will draw and fire the handgun with only your right hand. (Left-handed shooters will conduct this drill as described in the next section.) Once your handgun is clear of the holster, fully extend your arm, slightly angle the handgun to about 11 o'clock, and engage the target.

3. **Sitting Left**—This could replicate shooting out the driver's window of your car. (Left-handed shooters will conduct this drill as described in the previous section.) Draw your handgun and move it across your body being aware of muzzle discipline.

Establish your two-handed grip just forward of your left breast (right for left-handed shooters) and tilt the handgun to about one o'clock. When shooting across your body at a 90-degree angle, it is nearly impossible to obtain a useable sight picture, so you are limited to point shooting or using a laser. The latter is preferred.

**4. Kneeling Left, Right, and Straight**—Shooting from the kneeling position is almost the same as shooting from the standing position. The difference is that instead of altering the direction you face with your feet, you twist at your torso.



5. **Prone, Back Down**—Once you are on your back, and this is a likely but undesirable position to be in when attacked, you have lost the ability to move. Your only defense is accurate gunfire. You can effectively shoot 360 degrees when you are on your back, but you will quickly see that it is much easier to accomplish with a laser sight as opposed to traditional sights of any kind. Work on shooting at a V1 zone from about five yards

from every position of the clock. **SAFETY NOTE:** To protect your torso from incoming bullets, it's a good idea to keep your knees about half bent when on your back. This also gives you the best platform from which to regain a vertical position, move, or roll. Be very cognizant of your muzzle when drawing your handgun or shooting so as to not cover your legs.

**6. Prone, Back Up, Side Down**—If you are prone on your tummy, you can shoot with relatively good accuracy straight ahead, but, as you will see, your range of elevation is limited. If time permits, you may be better off to roll to either side in the semi-fetal position, with your body parallel to the face of the target.

**Goal:** Obtain V1 zone hits from all of the positions described.

**Notes:** You need to practice shooting from unconventional positions, because you might actually have to do so to save your life. These are not timed drills, they are familiarity exercises that will not only give you experience operating outside your comfort zone, they will give your brain a frame of reference to work from if you are ever in one of these positions. When you reach this level of training, work from these positions, at least briefly, every time you visit the range. Once you're getting hits, integrate the use of a handheld flashlight.

**Remedial Training:** For the most part, this is a sight alignment (traditional or laser) and trigger control drill. To be successful shooting from freaky positions, you have to apply all your concentration on the sight picture and trigger manipulation. If you have successfully mastered all the previous drills, you are ready for

this exercise. Just slow down and concentrate on the secret and be cognizant that you never let the muzzle of the handgun cover your body parts.

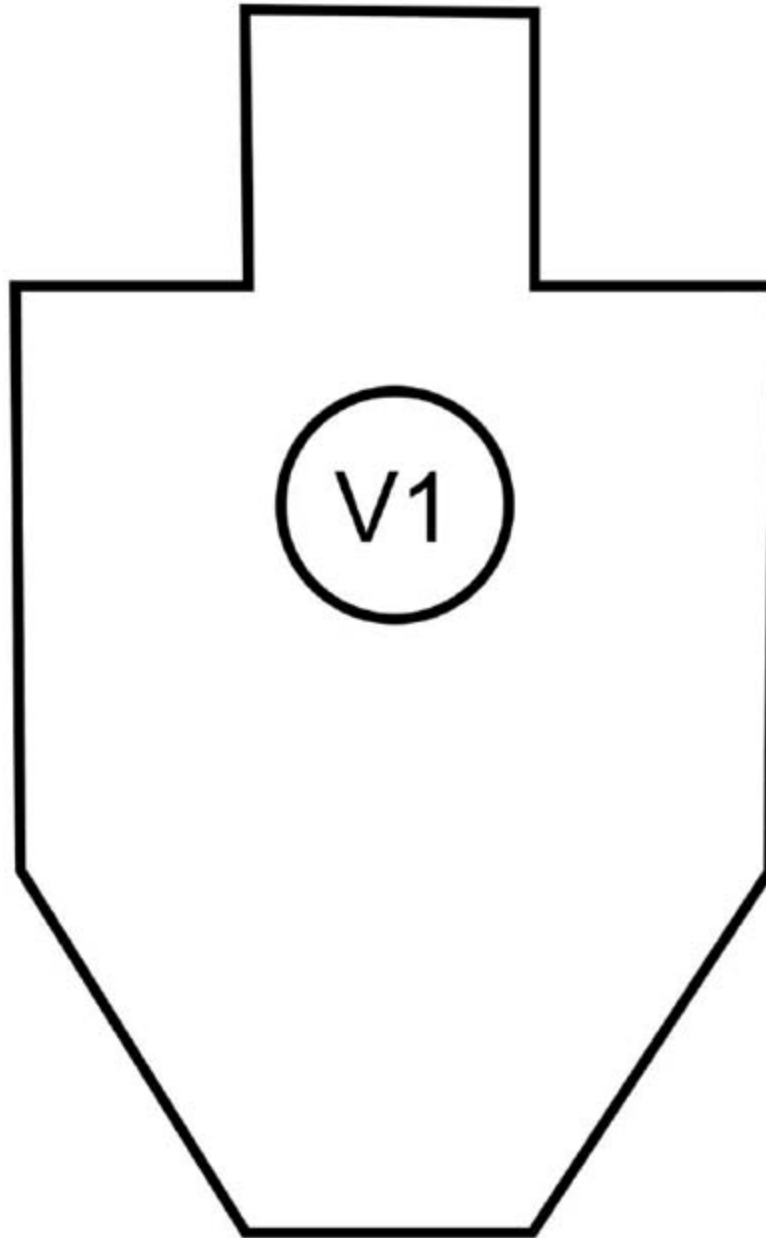
## **LIVE-FIRE DRILL 8: SHOOTING ON THE MOVE**

**Purpose:** Develop your ability to shoot accurately while moving.

**Resources:** Handgun with holster and laser grips, 10 to 40 rounds of ammunition, target with a single V1 zone (as shown opposite).

**Method:** Draw from the holster and engage a stationary target from three, five, and seven yards while moving forward, backward, and laterally.





1. **Moving Backwards**—Draw a line on the ground two yards in front of a V1 Zone target and another line three yards further back. Stand in front of the target at the two-yard line. On a signal from the shot timer, draw and fire a shot from the two-yard line and then begin moving backwards, shooting as you go. Fire your last shot from behind the five-yard line.

**2. Moving Forward**—Working with the same two- and five-yard lines, stand in front of the target at the five-yard line. On a signal from the shot timer, draw and fire a shot from the five-yard line and then begin moving forward, shooting as you go. Fire your last shot from the two-yard line.

**3. Moving Laterally**—Stand five yards in front of a V1 zone target and then step three yards to your left or right. On a signal from the shot timer, draw and engage the target with one shot and then begin moving parallel to the target, across its front, shooting as you go. Repeat going the other direction.

**Goal:** Obtain five V1 zone hits on a target at various distances, while moving backwards, forwards, and laterally.

**Notes:** Shooting while on the move is one of the most difficult forms of shooting to master, but it's an important one. Why? If you stand still, you make a good target. You may need to move to cover or to protect a friendly. You might want to increase the distance between you and your attacker, or you may need to move forward to available cover or towards an escape route. You also may be trying to get to a better weapon like a shotgun or rifle that will help you solve your problem. (RULE No. 10)

Until you have mastered the secret, you will not be successful with this drill. The tendency is to stop for every shot and, in truth, when first learning this technique that isn't a bad approach. As you become more comfortable with the process, focus on your footwork to better stabilize your shooting platform.

When moving forward, your foot placement should be heel first, toe second. When moving to the rear, your foot placement should be the toe first and heel second. When moving laterally, do not walk as normal, rather side step, moving one foot out and bringing the other along, but *never* cross your legs or place your feet together. You have no balance when your feet are side by side.

After trying this drill several times using the handgun's sights, run it again with the laser and you will discover there is indeed no better way to get accurate hits, fast, while moving. You will also see that you can move normally and still get hits without having to sidestep. Once you can perform this drill to standard, integrate the use of a handheld flashlight. Use any one of the flashlight shooting techniques explained in [Chapter 10](#).

**Remedial Training:** Work with this drill conducting dry-practice, including simulating recoil and recovering for the next shot. Here again, a laser is a great tool, even if you prefer to shoot the drill with sights. Watch the laser when you are dry-practicing this drill and when conducting live-fire at half speed. It will always tell you where your muzzle is, and this will help you learn to get it back on target. **Future Training**

Once you can successfully completed all the Live-Fire Drills to standard, what next? We have been working only at close distances. I don't know about you, but I hope I can be further than 15 feet away from anyone wanting to assault me. So, the logical next step is to increase the distance. Drills you ran at three yards you can now run at five yards. Those you ran at five yards should now be run at seven yards.

It has been shown that, if you are within 21 feet of a potential attacker, and if they are athletic at all, they can cover that distance in about three seconds. This is a good benchmark for you to work towards. Go back to Live-Fire Drill 1 and increase the distance to seven yards. Work back up through all the Live-Fire Drills at the longer distances. Do not alter the par times.

When you can perform all of the Live-Fire Drills to standard at the longer distances, you are ready to, in a sense, graduate and move on to the Evaluation Exercises in [Chapter 17](#). You are also ready to start working with these same drills using only one hand. Start with your strong hand (shooting hand) first and begin with Live-Fire Drill 1. Remember to alternate and do the same drills weak-hand only. Often shooters are just as accurate with their support hand; the problem is that their ability to control recoil and shoot fast decreases. You might also find that, if you are shooting with your support (weak) hand only, say your left hand (for right-handed shooters) and you are right eye dominate, you may need to slightly tilt the handgun in front of your dominant eye.

## Chapter 17

# Evaluation Exercises

*You can't miss fast enough to win a gunfight.*

**O**bviously, as you progress through your training, you can tell if you are improving. The question many want to know is, “How will I know when I am good enough?”

Sorry. You can never be good enough. You should never stop training and you should never assume you're talented enough with a defensive handgun to solve any problem. Still, knowing how you stack up when it comes to other civilian shooters or cops can give you confidence, and while confidence cannot replace skill, it can help you succeed and be more comfortable in your surroundings. Your skill level is something you need to know, if for no other reason so that you can improve it.

You should have an idea of how good you are compared to others. If you are better than most, it instills more confidence. If you are worse than most, you might question your ability to properly deal with a lethal encounter while armed. Maybe a gun isn't for you. Maybe you should consider pepper spray or a taser. Both, by the way, are probably more efficient than a handgun at stopping most lethal confrontations, *if they are fired*. The difference is that a handgun is better at stopping a fight before it starts and without the trigger being pulled. This is only because people have a tremendous aversion to getting shot—with *any* kind of gun.

After a career of teaching police officers how to shoot, running combat pistol matches, and teaching the armed citizenry, I've developed a few drills I use on a regular basis to test shooters and handguns. I've fired these drills enough and seen them performed enough to establish a good idea of what average is. I can reasonably predict how the average gun owner will perform on these drills, how well the average police officer will do, and even how well one of the top five percent of either group will do.

If you can conduct any one of these drills to standard, you are, without a doubt, better than the average person who carries a concealed handgun for personal protection. If you can conduct them all to standard, on demand you are better at defensive pistol craft than 95 percent of all cops, and your marksmanship skills would compare favorably with most Gunsite 250 Pistol Class graduates. What's the standard? Perform the drill with no misses and within the allotted time—not after three unsuccessful attempts, you need to do it to standard the first time. Every time.

Now you're thinking, "No misses? That's ridiculous! I've never heard of a qualification course that required a score of 100 percent to pass!" And, you know what? For the most part, you're right. By and large, most military, police, and concealed carry training courses require a score of about 80 percent to pass on both written and practical examinations. Just take a breath and think about this for a moment and you will realize that, from a practical standpoint, such a standard makes no sense at all.

If you are going to start flinging bullets, then you should be able to demonstrate your control over every bullet you fire. Not some of them, not 80 percent of them—*all* of them. I graduated the West

Virginia Police Academy as the Top Gun. In a class of more than 40 police cadets, I was the only one to shoot a “possible” score. The rest of the class scored somewhere between 80 and 100 percent. I’m not telling you this to brag; in actuality, the course of fire wasn’t all that difficult. We stood in one spot while we shot and had plenty of time. But here’s the thing. From a practical standpoint, I could have still “qualified” if I had put 49 shots in the 10 ring and fired the other 12 shots at the range officer!

Here’s a fact for firearms instructors and anyone wanting to measure their skill with a handgun: *misses don’t count!* They have no place in shooting. Are they a reality of shooting? Yes. Do they happen? Yes. However, our world has become so second-chance orientated that a miss on the range is like dying in a video game. You just hit “restart” and keep going. A firearms evaluation drill should measure your ability to hit, not miss. Saying you can pass with an 80-percent hit rate is like saying you can pass with a 20-percent miss rate. It’s like saying you are faithful to your husband 80 percent of the time. That might be alright with you, but I’m betting he’ll have a different opinion. You own every bullet you fire, so you need to be able to put every bullet you fire in the right spot.

One problem with most firearms trainers and most shooting schools is that they work with a group of students all at the same time. When they test their pupils, they test them together, under one par time. This presents the wrong message, one that says if you can shoot within that time limit you are good enough, even if you miss some of the time. Consider that your best shot during training and evaluation will be your worst shot in a life and death encounter. The

standard is to hit and hit every time you pull the trigger. Make your worst shot a hit!

How do you test this? One person at a time. You set the drill and require no misses. You measure ability with time. The faster you can get all your hits, the better you are. How fast do you need to be? You cannot be fast enough.

All you will need for these evaluation drills— which are all based on a 100-percent hit rate—are a collection of silhouette targets with V1 and V2 zones, target stands, your handgun, your holster, an additional magazine or speedloader, and a shot timer. You will also need some sort of barricade or something to use as cover. Just remember, when the shot timer sounds, it doesn't mean it's time to go fast, it simply means it's time to "go" and not miss.

For what it's worth, if you set up these drills all at the same time, you will have 10 targets, one for each of the rules. Write the rules on the targets; it's a good way to remember them. Also, if you would like to keep score beyond pass or fail, it will take 25 shots to complete all five evaluation drills. A perfect score would be 25, so you can deduct one point for every shot that lands outside the kill zone.

What's a good score? Twenty-five.

What's a bad score? Anything less than 25.

Of course, you should keep score so that you can monitor your improvement. As you improve and are able to get hits faster, you can reward yourself for completing drills faster than the par times. If you shoot a drill without any misses and your time is less than the par time, add the difference to your score. For example, if you shoot the Forty-Five Drill in 3.92 seconds with no misses, you would



subtract 3.92 seconds from the par time of five seconds and then add 1.08 to your score for a total of 6.08. To make all this easier, you can find a score sheet for all the evaluation drills in Appendix D.

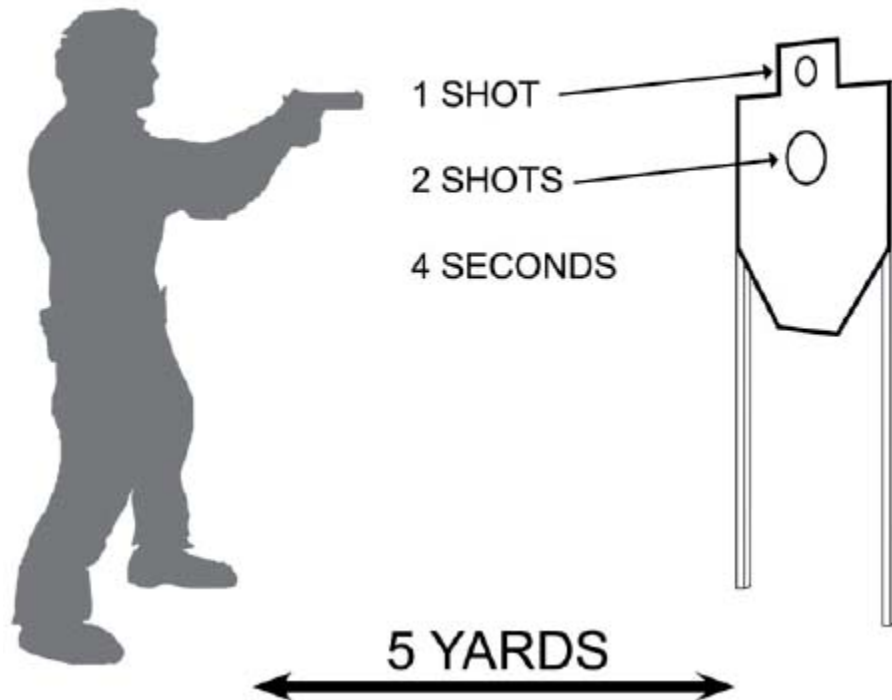
Interestingly enough, I've shot these drills many, many times with a variety of handguns. My average score with a laser, when compared to sights, is about 14 percent better.

Though it means absolutely nothing to anyone but me, I call this collection of drills the Shadowland Drill, named after the range my family and I live on here in West Virginia. It is the standard 25-shot evaluation drill I subject every handgun, holster, sight, ammo, and accessories, or techniques to when I'm evaluating them. So, if you read anything I write in the future and I mention that something or someone was subjected to the Shadowland Drill, you will know what I'm talking about and you will know that a score of 25 is not obtainable with junk or by someone who cannot shoot.

## **The Mozambique/Failure Drill**

Sometimes shooting a bad guy in the chest just isn't enough. Felons can be high on adrenalin or drugs to the point they do not recognize or respond to pain. They could also be wearing body armor. Some years back, Col. Cooper developed what he called the "Mozambique Drill" for the purposes of dealing with this type situation. Today, with the proliferation of zombies in our culture, it could be called the "zombie drill" or "zombie check," because a head shot is the only way to kill a zombie. At least that's what I've been told.

## Mozambique / Failure Drill



As the story goes, a Rhodesian named Mike Rousseau was serving as a mercenary in the Mozambican War of Independence. During a fight, he bumped into a guerrilla soldier armed with an AK-47. Rousseau immediately performed a double tap—two shots to the center of the torso. However, even with two new and bleeding nipples, the guerrilla was still coming at him, so Rousseau tried for the head. It kind of worked. The bullet hit the base of his attacker's neck, severed the spinal cord, and stopped the fight.

Hearing this story, Cooper later incorporated this three-shot drill into his program of instruction as a way to end a fight that cannot be immediately stopped with bullets in the chest. Over the years, this drill has morphed into a variety of other drills and, if you put any two firearms instructors together, you'll get a different opinion as to how it's to be properly executed.

Ideally, a more practical application might be to fire two shots to the torso, take two steps back and to the side to keep your distance and, if your attacker is still attacking, attempt the head shot. However, here we are more concerned with your shooting than tactics, because the subtle nuances of the proper tactics can vary from situation to situation.

For simple evaluation purposes, position a target with a V1 and V2 zone five yards to your front. At the start signal, draw from concealment and fire two shots into the V1 zone and one shot into the V2 zone as fast as you can do so without missing either zone. If any of your three shots land outside the V zones, you have failed the drill. A par time for this drill should be four seconds. Most police officers cannot do it in less than five seconds without a miss. Anything less than three seconds is very good.

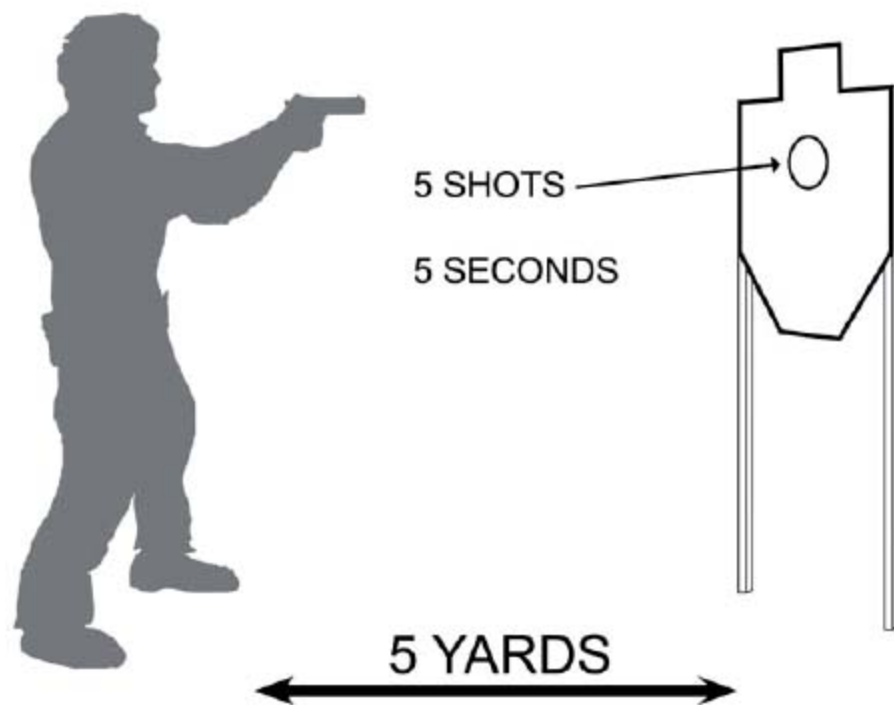
## **The 45 Drill**

If you study shootings, you will see a trend. Most often what happens is someone, cop or civilian, points the gun at the bad guy and starts pulling the trigger. It seems that this “dumping” of available ammunition is the common response. From a training standpoint, it is easier to train to a common response than it is to create a conditioned response. This is how the 45 Drill came about. It is an evaluation exercise that establishes your ability to do what you are, in fact, very likely to do if you are actually attacked.

Several similar versions of this drill exist under other names. What they all have in common is that they test your ability to shoot a handful of shots into a relatively small area, at close range and at a fast speed. I initially developed the 45 Drill as a means for me to

test and evaluate handguns, holsters, and sights. By conducting this drill on a regular basis, it provides a good benchmark for me to measure the shootability of various handguns, sights, and other gear. Safeties that are hard to deactivate, sights that are hard to see, lasers that have difficult to activate buttons, and holsters that are hard to draw from all stand out when subjected to this drill.

### **Forty-Five Drill**



Based on my experiences teaching on the range and watching how civilians and police officers perform, I established that only about five percent of all police and civilian shooters are capable of (on demand) drawing a handgun from concealment and firing five shots into a five-inch circle (V1 zone) at five yards distance in five seconds. Drawing and shooting five shots from concealment is not the problem. The problem is putting all five bullets in the five-inch circle. In fact, on average, you can expect 20 percent of the shooters

to miss at least one shot, about 30 percent to miss two shots, and about 30 percent to miss three or more shots when attempting this drill. The other 15 percent will get their hits, but not within the five-second time limit.

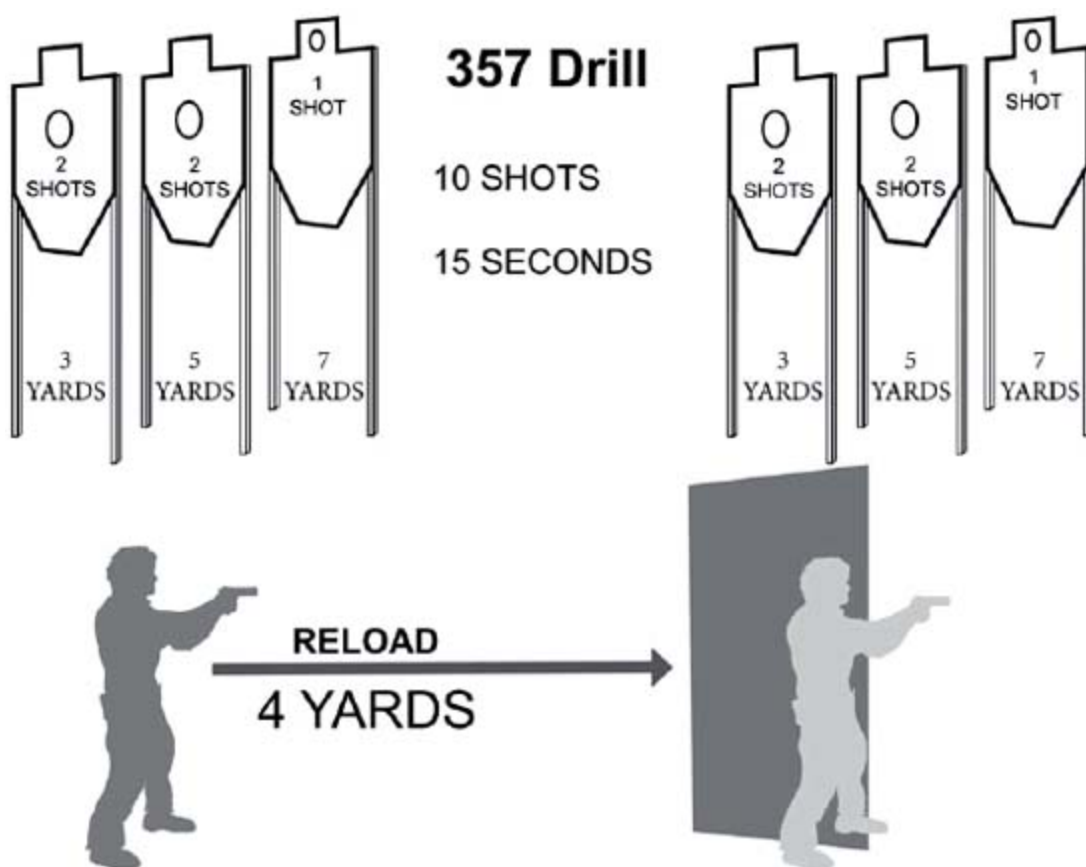
To test yourself on the 45 Drill, stand five yards in front of a silhouette target with a V1 zone. At the start signal, draw your handgun from concealment and fire five shots into the V1 zone. If you exceed the five-second time limit or if any of the five shots land outside the V1 zone, you have failed the drill. Times of less than four seconds with no misses are very good. Times of less than three seconds with no misses are outstanding.

## **The 357 Drill (El Prez, Modified)**

Colonel Cooper created another very popular handgun training evaluation drill called the “El Presidente.” It was first published (as far as I know) in the January/February 1979 issue of *American Handgunner* magazine, and the drill’s use was considered a benchmark for gauging a shooter’s weapon presentation, shooting, reloading, and target transition.

I’ve always thought the El Presidente (El Prez) Drill was missing three things that would have made it the premier defensive handgun evaluation drill. Those were movement, use of cover, and a precision shot. Additionally, if you are armed with a five-shot J-frame, you are two shots short of being able to complete the original El Prez Drill. That’s why I modified the drill a bit. I named my version the 357 Drill, because the targets are positioned at three, five, and seven yards. For the more politically inclined, my can call it “The Senator Sweep.”

Here's how the drill works. You will need six silhouette targets, four with V1 and two with V2 zones. Position two V1 zone targets at three and five yards. Place a V2 zone target at seven yards. Laterally they should be about a foot apart. Position another three targets in the same configuration, but about four yards to the left or right of the first three targets. Finally, position a barricade directly in front of the second group of targets. At the start signal, you will engage the first three- and five-yard targets with two shots to the V1 zone, and then you'll engage the seven-yard target with one shot to the V2 zone. Then, moving laterally to cover, you will conduct a reload. Once behind cover, ease out to the side and engage the second bank of targets just as you did the first bank. Total shots: 10.



The obvious goal is to not miss the V zones with any shot. You should also perform the drill miss free in less than 15 seconds. If you do miss any of the V zones or it takes you longer than 15 seconds, you have failed. Miss-free times of less than 13 seconds are very good, and if you can shoot this drill in less than 11 seconds and not miss a single V zone, it is outstanding.

An average shooter will miss the V1 zones at three and five yards about 15 percent of the time, but they will miss the V2 zone at seven yards about 60 percent of the time. Slowing your shooting cadence for a precision shot is difficult. So is conducting a smooth reload under stress. Most will find revolvers a little slower to reload during drills like this, so allow an additional second to your par time if you are shooting a revolver.

## **The Back-Off Drill**

One of my favorite drills is also one of the most difficult for most shooters, because it involves moving backwards. Why would you want to move backwards? Duh, to get away from the ogre who is trying to beat you to death with a wood bat. Statistics show that about 10 percent of cops are killed with their own gun. This happens because cops let bad guys get too close and the bad guy takes the cop's gun and then shoots the police officer with it.

In a situation where you are being attacked, distance is your friend. The greater the distance between you and the bad guy the more time it takes him to get to you. You should never let an attacker get close enough to put his hand on you or your gun.

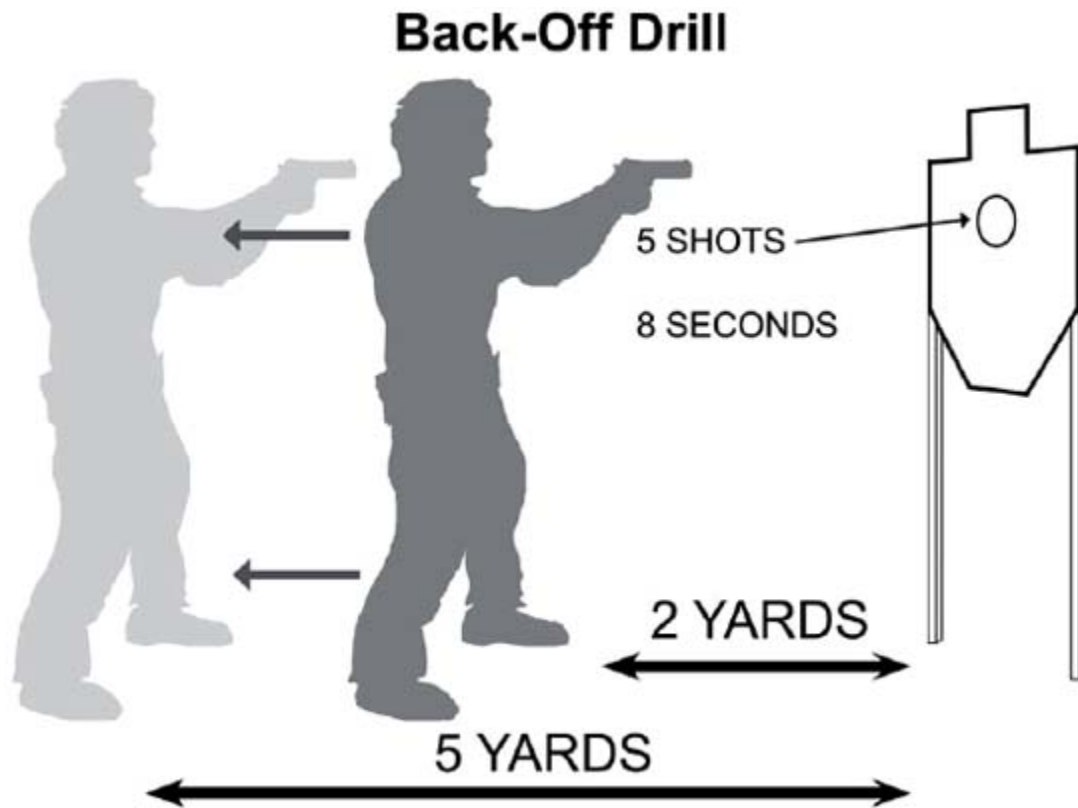
The Back-Off Drill was devised to teach a shooter to create distance while shooting at the same time. Granted, moving and

shooting is a very hard thing to do. My research has shown that most shooters, particularly those untrained with a laser, can move and shoot while using a laser-sighted handgun about 15-percent more accurately and about 20-percent faster. The reason should be obvious: with a laser-sighted handgun, you do not have to line up sights and then keep them lined up on the target. All you have to do is keep the red dot on target and pull the trigger.

To conduct the Back-Off Drill, stand six feet in front of a silhouette target with a V1 zone. At the start signal, draw from concealment and fire one shot. Then, begin moving backwards. You can stop and shoot if you like, but, ideally, you should keep moving. The goal is to fire five shots and obtain five V1 zone hits with the last shot being fired from a distance of 15 feet. The goal is to do all of this in less than eight seconds.

Only about 50 percent of the shooters who try this drill can complete it with no misses, even if they take as long as 16 seconds to perform it—if they shoot while moving. On average, V zone misses will occur about 25 percent of the time. Five hits in less than eight seconds is good. I'd bet that no misses in less than seven seconds is better than 95 percent of all the police officers in the United States can perform the drill, and anything less than six seconds is very good indeed.





## The Reach-Out-and-Touch-Someone Drill

Not all situations where you may have to shoot to save your life will occur at distances where you can smell your attacker's breathe. You may need to reach out to 15 yards or further to stop a threat. The Reach Out and Touch Someone Drill is designed to test your ability to get kill zone hits at greater distances.

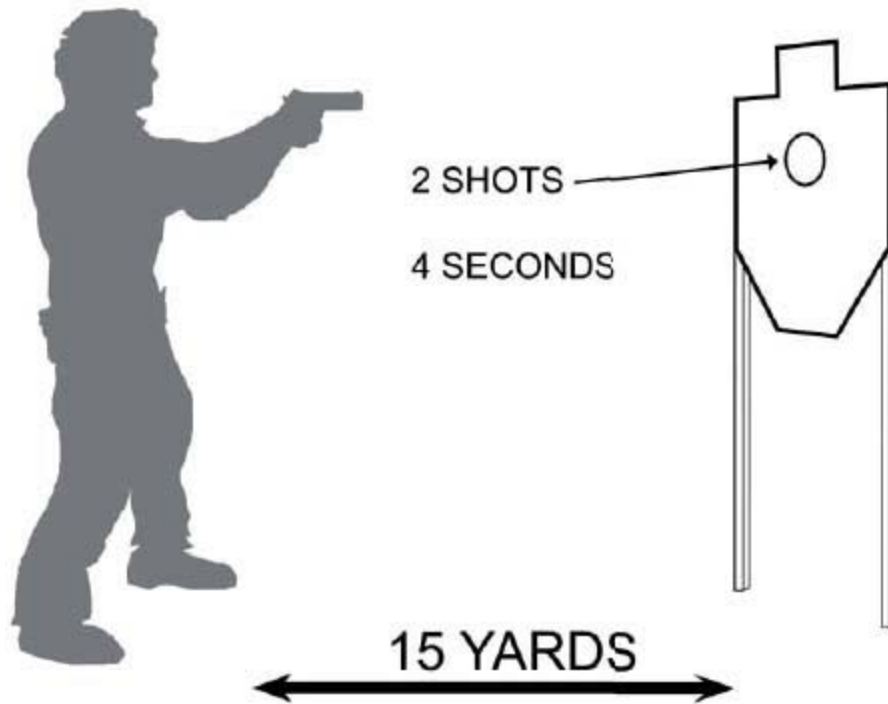
Place a V1 zone target at 15 yards. On signal from the shot timer, draw your handgun and fire two shots into the V1 zone in less than seven seconds. Two hits in less than five seconds is very good.

To complete this drill to standard, you will have to react fast to the shot timer, execute a smooth and fluid presentation, and quickly react to two flash sight pictures. You will have to perform the secret perfectly, or you will not get your hits. Work this drill with and

without the laser and see which sight method allows you to complete the drill with no misses and with the fastest time.

Believe it or not, of the five evaluation drills, this will be the hardest for you to master.

## **Reach-Out-and-Touch-Someone Drill**



## Chapter 18

# Other Stuff

*“The three great essentials to achieve anything worthwhile are, first, hard work; second, stick-to-itiveness; third, common sense.” —Thomas A. Edison*

**T**he evaluation drills covered in the [previous chapter](#) are not the only drills you should practice or use to evaluate your abilities with a defensive handgun. However, these drills cover most of the basic skills you’ll need to at least feel comfortable carrying a handgun for personal protection.

Try others, experiment, create your own. You cannot be too accurate or too fast, but you can also not miss fast enough to win. Regardless the drills you use to evaluate your skill, focus on accuracy first, get to the point where you can perform the drill to the accuracy standard, and then, and only then, increase the speed.

There are other things you can do to become a better shooter. I am a firm believer in the use of .22-caliber conversion kits, and they are available for many full-size handguns. I have a great deal of experience with the Kimber 1911 conversion kit, and both my son and I have used it extensively. In fact, a Kimber rimfire conversion kit on a Kimber Crimson Carry 1911 was the first handgun he fired.



**Do not underestimate the value of a good rimfire conversion kit for your defensive handgun.**



**Local concealed carry and combat pistol matches are fun and are a good place to test your shooting skills with a little added stress.**

Not only can a rimfire conversion kit be a great training aid, they are just downright fun and affordable to shoot. If you have a wife, husband, girlfriend, or anyone who is new to shooting, rimfires are a great way to get them interested without spending a lot of cash and without a lot of noise and recoil.

As with any physical skill, it will take hard work to get better and you will have to stick with it. When you go to the range and shoot well and then go back the following week and shoot poorly, don't give up. It's natural to have highs and lows during training. Use your common sense, too. If you get to a point during a practice session where you are not doing well, are not focused, or are not having fun, then stop. Stop and go home, go to a movie, or just go drink a beer. Everyone will have good and bad days. Unless you are special, you are no different.

I would also encourage you to attend local combat shooting matches. True, the stages you shoot will more than likely not have you doing things that are tactically correct, but that's not the point. These matches give you a chance to shoot in a different venue and under stress. Both are good things when you are learning to shoot—and after you *think* you have learned all you need to. Here's the thing: you don't have to shoot to win. Shoot to get all your hits, work on your form. Use these matches as a fun way to practice.



**Dummy rounds are a safe way to make your dry practice more realistic.**



**Action Target's PT Hostage targets are affordable and portable steel targets that can add enjoyment to your training sessions.**

Chances are, too, that, at these matches, you'll meet a bunch of great folks that have interests similar to yours. You might even meet a man or a woman and become friends or more. I think it is always a good idea for the object of your affection to be someone who is responsibly armed!

These matches are also a great place to be introduced to new guns and gear that might fit you better. Shooters like to show off their stuff and they feel like an expert when you decide you like what they have. You can do the same; everyone should feel like an expert at least once in their life.

Always dry-fire practice. It will make the best shooter better. You can do it at night, on vacation, and maybe even at your office. Some folks have putting greens in their office. I have a dry-fire range in mine. Work with dummy rounds. They are safe and add realism to dry practice. You can use them to practice immediate action, like stoppage clearing drills, and for practicing reloads. Experiment with laser training devices. They will add spice to dry-fire practice.

If you have your own range or a private place where you can go shoot, consider purchasing some steel targets. Steel targets provide instant visual and audio feedback. They are fun to shoot because you do not have to tape holes or carry a stapler, plus you can leave them outside year round. Action Target ([www.actiontarget.com](http://www.actiontarget.com)) has a wide selection of steel targets. My favorite is the PT Hostage Target, because, in addition to being shaped like a silhouette, it has a swinging head plate.

If you have a friend or family member to shoot with, Action Target's dueling tree is loads of fun. It has six steel plates that swing from side to side. Paint one side of the plates one color and the other side another hue. You and your shooting partner can then try to get all the plates on the other's side. Shooting steel plates, man on man, is a great way to induce stress and make you perform the secret to standard.

I'd also suggest you start saving money. Every time you purchase a box of ammo, put that same amount of money aside. Start a shooting school fund. By the time you have fired about 70 boxes of ammo, you'll have enough money saved to take the Gunsite 250 pistol class. When you do, you can give this book to a friend who was not smart enough to save their money.





**A dueling tree like this one from Action Target is fun to shoot with or without competition. Steel plates will make you perform the secret to standard or they will frustrate you to no end.**

## Chapter 19

# Opinion

*Handguns, holsters, hollowpoints, and hearsay.*

**O**pinions are things you will for sure find plenty of when it comes to guns, concealed carry, and personal protection. *Everyone* has an opinion, some good and some bad. Some folks have good opinions and cannot express them. Others have bad opinions and the gift of bullshitting, and these can make a stupid idea sound as tempting as a free night on the town with Carmen Electra.

For example, in the wake of the mass shooting at the Batman movie, a noted firearms trainer by the name of Travis Haley wrote this on his Facebook page, and I quote:

“The majority of concealed carry and open carry armed citizens are a liability. Just because you go through a one-day course doesn’t mean that you can problem solve an armored active shooter in a never expected, dark, tear gassed, disruptive environment with screaming people while stepping over dead bodies. You must understand advanced applications under stress. Just like a pilot graduating flight school doesn’t mean he’s ready to jump into air to air combat.”



**Handguns are for personal protection, but can also be used for hunting and fun. Killing giant alligators with a Diamondback DB380 is a little bit of all three.**



**Not only are firearms tools, they can be things of beauty. Like this custom Browning Hi Power from Robbie Barkman at Robar. If there was ever a handgun to challenge the 1911, it's the Hi Power.**

I responded on my blog and gave the fellow the equivalent of a public flogging. Now I don't know if Haley, who is a combat veteran and deserves *immense* respect for that, was trying to drum up business for his firearms training company, actually believed what he wrote, or was just having a Jim Zumbo moment. Regardless, I took issue with his comments, and you should, too.

Why? We don't need permits or mandatory training to carry condoms or handguns concealed. It's about protection. Use it if you need it. Passing a requirement that citizens receive training and

obtain a permit before they tuck a J-Frame in their coat pocket is like passing a law that requires rapists to wear rubbers. Trust me, if a perverted fiend comes for my wife—prophylactic or not—she is going to put several 9mm holes in inconvenient places, and a CCW permit will be the last thing on her mind.

People wear shoes to protect their feet, belts to hold their pants up, and glasses to help them see. They carry guns because they make them feel safe and in case they need to defend their lives or that of their loved ones. The fact that you're not a tac-tard trainer who makes money teaching folks how to shoot doesn't mean that you or others who have not been trained are any less a citizen or have any less right to personal protection. Comments like those made by Haley are what politicians and the anti-gun crowd use to infringe on our abilities to protect ourselves by passing stupid laws that better enable the predators among us. It's not about the 2nd Amendment, it's about *survival*. Any legislation undermining that goes against nature.

I don't need mandatory training or a permit to wear thong underwear or carry a gun that no one will see. Sure, it's always good to get *all* the training you can, whether you're playing a guitar or carrying a gun. But you, not the government nor anyone else, should decide how much training that is.

Contrary to what most people believe, a firearm is *not* a deadly weapon. It is a tool. The most dangerous weapon (thing) on our planet is the human being. Should we specify mandatory training for humans? Should we insist they all attend a Baptist church so they can learn how to live, how to treat other humans? Where do the mandatory government stipulations end? I do believe in

mandatory training for anyone who uses a firearm, but that mandate must come from the individual, not some tac-tard, some politician, and most of all, not from our government.

There, there's an opinion for you. And what would a book about handguns be without opinions? Well, not very entertaining, so I'll share some more.

How about a pistol opinion? I hate Glock pistols. I carried one in one form or another for 13 years, when I was a cop. Have I hurt your feelings? Probably. A lot of folks like Glocks. I don't like them because they feel weird in my hand, because they have no manual safety, because their triggers suck, because I have seen three blow up and, well, because they're ugly.

Does that mean you shouldn't choose a Glock as a personal protection pistol? Nope. I'm not going to tell you what pistol to buy or what kind of girl to marry. However, with the girl, I'd suggest you get one who knows how to cook. It won't be long until some of that pretty wears off and, when it does, you will still be hungry. I was smart in that regard. (My friend Chris Ellis says I was lucky, but I don't believe in luck.) I married a younger woman with pretty permanently embedded in her, *and* she can cook an omelet, grill a steak, and make a mirror wish it could see itself.



**A box stock Gunsite Colt CCO is about perfect as is. XS Sights and laser grips take care of the “about.” These pistols are only available from the Gunsite Pro Shop. Pick one up when you’re out there taking your 250 pistol class.**





**This 1911 has had thousands of rounds fired through it. It has been carried for miles and it also was used to win a spot in the West Virginia Governor's 20, in 1995. Semi-retired now, it is relegated to "dressy" occasions.**

I like 1911s. No, not just because they are nostalgic or because some folks consider them a "professional's pistol." I like 'em because they work, because they have a straight-pull trigger, because they have a manual safety that locks the slide, because they are built strong, and because, in my experience, they are easy to shoot well.

Usually I carry a Gunsite Colt CCO pistol, which is a Series 70 1911 Officer's-size frame with a Commander slide. But, I also have a Colt Lightweight Commander in the Stack-On safe beside my bed. During my Gunsite 250 Pistol Class, I used a steel-framed Para Commander. In fact, I used that pistol to win the man-on-man shoot-off at the end of the class. Oh, and yeah, there is this sweet 1911



that was customized by Joe Bonar at Novak's almost 20 years ago. His son Dustin reworked it after Joe's death, and it is what I call my "Sunday go-to-meeting gun." It's much too nice for casual carry. All these 1911s have something in common: XS Sights.

I could carry any handgun I want. I've also shot most of the defensive pistols on the market, chambered for every modern cartridge, and I've let my wife and son do the same thing. They prefer 1911s, too. Drema has a slightly customized Remington R1 in .45 ACP, and Bat has a to-die-for Wilson Combat 1911 in 9mm. Do I think folks who don't carry a 1911 are fools? Nope. Just ill-informed, or maybe they have different opinions than me. I don't wear boxers, by the way.

I sometimes carry a Browning Hi Power. When it's hot and I'm wearing short pants—I don't wear short pants too often, because I look like I'm riding a chicken—there's a Diamondback DB380 in my pocket. I sometimes carry that same little gun, when I'm dressed all normal like. When I'm out in the woods around Shadowland, I often have a Ruger Blackhawk strapped on. Other times it's a Ruger SP101 in .327 Federal Magnum. It really doesn't matter to me and it shouldn't matter to you. I can shoot all these handguns and they are all reliable and capable of stopping a fight.

What about defensive handgun cartridges? None of them are really all that wicked, and there are recorded successes and failures with everything from a .22 Long Rifle to a .44 Magnum. Pick one you can shoot, load it with good ammo and, when you're attacked, shoot the bad guy to the ground. You should also probably load that handgun with hollowpoints, although my friend Tim Sundles at

Buffalo Bore truly believes in hardcast lead bullets. I'm not so sure that's a bad idea, either.

Which hollowpoint do you choose? My DB380 is loaded with Winchester Silvertips, My Browning Hi Power with 115-grain Barnes TAC-XPs, my .327 Federals with 115-grain Gold Dots from Speer, and my .357 is generally filled with Gold Dots, too. What about those beloved .45s? Their magazines are full of 160-grain TAC-XPs from either Wilson Combat or Buffalo Bore and will leave the barrel of a Commander at about 1,050 fps. (Sometimes you will also find Silvertips or Golden Sabers in those magazines.) Oh, and when I'm in snake country, you'll find the first two loads in the magazine or the cylinder are CCI or homemade snake-shot loads. Nothing changes a rattler's mind like a load of shot!



**An exquisite pigskin shoulder rig from Galco. You think shoulder holsters are uncomfortable? Try a really good**

**shoulder rig from Galco and you'll change your mind.**



**One of the most affordable, concealable, and comfortable holsters you can buy is the VersaCarry. Yep, it looks cheap, but it works.**

No discussion of handguns would be complete without mention of holsters. For my concealed carry guns, I don't have a wide selection.

I found holsters that work for me and they're what I use. Around Shadowland, I wear a Galco Avenger. Out on the town it's usually a Galco V-Hawk. If I'm dressed in Sunday go-to-meeting garb (which is rare), I'll use a custom Galco shoulder holster. For my revolvers, Galco or El Paso Saddlery. Why Galco leather? I've found none better.

I also often use a unique carry tool called the VersaCarry, when I need deep cover carry or when it's so hot I'd rather be wearing nothing but my skivvies. The VersaCarry is an ingenious in-side-the-pants holder designed by a young man from Texas. It's sort of a modernized version of the OSS string holster, and I've not found a more covert way to carry a handgun.

As far as lasers and sights, that's a no-brainer. Most all of my carry guns are fitted with XS Sights. Most also have Crimson Trace laser grips. If you have made it this far in this book and don't know why, you've been drinking on the job and are not very observant. I bet your wife is continually telling you, "You never pay attention to me. You didn't even notice my new hairstyle last week or the breast implants I got last year."

Finally, what about all the stuff you see written in gun magazines and on the Internet about concealed carry, handguns, holsters, and ammunition? Who can you believe? Who can you trust? Are there any writers or magazines better than others?

Of course there are. On the Internet, check out Gun Nuts Media. It's driven by Caleb Giddings, who was a contestant on the first episode of *Top Shot*. Granted, Caleb is a bit weird (I guess we all are), but he can for sure shoot a handgun and has some good ideas about training. We don't agree on everything, but you can bet that,

if Caleb writes it, he has some experience to back it up or he'll say otherwise.

Michael Bane, who you have probably seen on TV, is undeniably the most experienced firearms journalist extant. He can write almost as good as he talks, and he can talk to the camera, a crowd, or to himself. Anyone with half a brain could not have been exposed to what Bane's been exposed to over the years and not have learned a lot. And Michael has both halves of his brain. Check out his web presence at [www.downrange.tv](http://www.downrange.tv) and his blog.

When it comes to reading material, I've contributed to most all of the gun magazines on the newsstand these days. I've met most of the editors and many of the writers. You want more opinion?

Regarding honest editorial that has been fact checked and is published by a magazine whose editors extensively vet their contributors, the National Rifle Association's *Shooting Illustrated* magazine is beyond reproach. (So are all the NRA's other magazines for that matter.) It's headed up by a diverse mix of editors who work together to make sure you're not reading drivel. Does some drivel make it into print? Occasionally. But, by and large you, can trust what you read there.



**No, it's not a 1911, but this gun, which belongs to my friend Chris Ellis, was brought back from Germany after WWII. It was donated to the American cause by a dead Nazi. It just might be the coolest handgun I have ever fired.**

As for writers, here's the thing. A lot of writers get in print because they write well, deliver clean copy and good photos, and are on time. I've never been a particularly good writer, I just write like I talk. One thing I try to never do is write speculation. I test the guns I write about, I test the ammo on paper and in ordnance gelatin, and I proof-test training drills, sights, and such. If they work, I write 'em up. If they don't, I ignore them.

Some writers don't do that. Some guess or take a press release at face value. I know, you want me to tell you who is good and who is

bad. I'll do the first, but not the latter.

Dick Williams is a gentleman, a good writer, and he verifies before he types. Another is Bryce Towsley. Bryce has a way about him that rubs some folks, me included, wrong sometimes. That's probably because he's a Yankee. However, Bryce is a shooter, and a pretty good one. We may not agree on a lot of topics, but if Bryce writes that this or that gun worked, well, it did. He can tell a pretty good hunting story, too, but I think that's only when he has been drinking.

Mike Humphries, an editor at large for Harris publications, is one of the most knowledgeable gun guys I know in the print industry. He knows when guns were made, how they were made, who made them, and how they work. Can he shoot? Who cares? He knows guns. And so does Sammy Reese, who is one of my editors with FMG Publications. Sammy is a former cop and Marine who knows how to shoot and understands what common sense is. Well, I used to think that. For some reason he still lives in California.

Though John Haviland, John Barsness, and Brian Pearce rarely delve into articles about personal protection, they write the truth, they really test guns, and all can shoot about anything they pick up. Aaron Carter, Adam Heggenstaller, and Guy Sagi with the National Rifle Association are always factually correct and honest. You don't have to agree with them, but you can trust them. Same goes for NRA Senior Field Editor Sheriff Jim Wilson. Wilson is the real deal. He's been there done that and can tell you about it in a way few others can. He can pick a pretty mean guitar and hum a few bars, too. He also has an Internet presence; you can find him on Facebook and, like me, he has his own blog.

A few years back, at a Remington product seminar, about half the writers in attendance were arguing about the various features Remington decided to include or not include on its Enhanced R1 1911. The group was arguing about the safety, the sights, the lack of a guide rod, and even the damn color. I don't think there's such a thing as a perfect 1911, any more than I think there's a perfect woman. Everyone has a different opinion and the option of exercising it, so I was keeping my mouth shut.

Finally, after about 30 minutes of this stupidity, Sheriff Wilson finally spoke up. The room got quiet, and in that slow Texas drawl he has, the Sheriff said, "The 1911, as John Browning designed it, has been killing sombitches that needed killing for 100 years. All it really needs are sights you can see and a good trigger. Why don't y'all shut up and let these young men from Remington finish their presentation."

If the Sheriff would just learn that Irish whiskey is the 1911 of liquor, he'd be my hero.

Are there other good writers? Yep. Figure the rest out on your own. That's part of the fun, figuring out what's hearsay and what's not. Does that tac-tard on TV really know what he's talking about? Is it really a good idea to have a laser in the rear sight of your handgun? Just because I carry one gun, does that mean I have to carry a back-up handgun, reloads for both, and pepper spray, a first aid kit, and a machete everywhere I go? Personal protection is not rocket science and it does not mean you have to dress like a soldier or carry a bug-out bag to bingo on Saturday night. It's about common sense.



I'd also like to leave you with some additional advice about guns. Guns are not just for killing, not just to make us feel safe, and not just to put food on the table. Guns are *fun*. They are fun to shoot, customize, collect, and even lust after. Don't hesitate to take your gun to the range and just play. Engage in shooting games, try trick shots, compete, shoot to celebrate the Fourth of July, an anniversary, getting a raise, or even getting fired. Of course you gotta be safe—*always* be safe. But remember, shooting is fun, and the more you shoot the more fun you'll have, and the more fun you have the better you'll shoot. And, as soon as you learn to shoot, quit being so damn stingy and take a kid shooting!



As a side note, there have been several references throughout this book to "Shadowland," and that should probably be explained so that you don't get the notion it's some mythical place where mall ninjas, tac-tards and wannabe gunfighters go to drink whiskey and pontificate.

When I went to work as a Special Agent for the railroad police, I met John Velke. Velke had written the history of the Baldwin-Felts

Detective Agency. William Baldwin founded this agency and, in time, it became the Norfolk Western (now Norfolk Southern) Railroad Police. Baldwin was a self-described “shootist,” who had a storied law enforcement career, survived many gunfights, tracked down members of the Hatfield gang, and was friends with Teddy Roosevelt and even did some work for him. On the East Coast, around the turn of the century, Baldwin was every bit the legend Bat Masterson was in the West. My area of responsibility was the same area Baldwin had covered during his tenure with the railroad police.

Baldwin named his Troutville, Virginia, estate “Shadowland,” and after collaborating with Velke on the second edition of his book, my wife and I decided if we ever had a piece of ground worth naming, we’d do the same. This was somewhat ironic, since our first home, a used 1979 single-wide trailer, was set in a mobile home park called “Shadow Wood.”



**William Baldwin was one of the most notorious and feared lawmen on the East Coast, in the early 1900s.**



If you turn up the driveway to our hillbilly plantation/shooting range, you'll see a sign that says "Shadowland." Nope, it's nothing swanky, and it's a long way from an antebellum mansion. But it's our home, our castle. It's where we live, shoot, and hunt. And it's where we raise kids, who will do the same. It's also a historic tribute to one of the most storied lawmen to ever chase down a bad man.

So there you have it, an entire chapter of opinions and bloviating. If you like 'em, we got something in common. If you don't, rip these pages out and burn them. It won't hurt my feelings as bad as reading 'em probably hurt yours.

As a last point of thought, I'd like to leave you with a quote from Gunsite instructor Ed Stock. From a personal protection standpoint, it is a great credo to live by. It goes: "Be professional in everything you do. Treat everyone you meet with respect. But have a plan to kill them."

## Appendix A

# The Rules

*“But there are always the new graves, in some of them fellows you knew; there because of a faulty machine or bad judgment.” —Lieutenant Frank Luke, 1918*

**I**n the beginning of this book, there is a list of RULES. The first four rules apply to firearms safety, the next six rules to fighting with a gun. I have to give credit to where credit is due: the first four are courtesy of Jeff Cooper and the Gunsite Academy, the last six are simply expressions of common sense.

Throughout the text, where applicable, you have seen references to all 10 of these RULES. If you take nothing else from this book, these RULES, if followed, could be considered the credo of anyone carrying a defensive handgun. No doubt you or others will take issue with the training and evaluation suggestions, as well as those with regard to sights, lasers, lights, and ammunition. There is indeed more than one way to skin a cat, pick up a girl, eat a banana, or fight with a handgun. However, if you'll use these 10 simple RULES as a guide, you can greatly enhance your level of personal protection.



Humans do a lot of things every day of their life, from the time you dig your eye boogers out in the morning until you put on your Batman pajamas at night. Most of the things we do are mundane, simple actions we don't even think about, like driving our Prius and cramming fatty foods in our face until we have to loosen our belts two notches. Even though we don't think about these things as we do them, we look like we're good at it while we're doing them.

Your personal protection should be just as incidental. It should not be complicated, it should not be some super tactical routine dreamed up by a tac-tard on TV or down at the local range. It should be as seamlessly integrated into your lifestyle as kissing your wife or husband on the cheek before bed or making sure your fly is zipped when you leave the restroom. Survival should come as natural to us as it does for all animals. We are, after all, driven by the same needs of safety, sustenance, and sex.

Some instructors and gun writers like to complicate the concept of self-defense with a handgun. The more complicated they can make it, the more they can charge you to take their training or the more articles than can sell. Admittedly, if you're a member of SEAL Team Six, you have a lot of skills to learn. But those kinds of advanced

gunfighting skills aren't really needed in everyday life unless you're a monster hunter. (I'm guessing it won't be long until someone opens a zombie hunting school.)

When it comes to firearms safety, everyday survival, and the basics of personal protection with a firearm, the old axiom "keep it simple" applies. After all, all you really want to do is live out your life without interruption from vagabonds, pirates, thieves, and murderers. To do that you don't need to be a prepper, someone others call a "tac-tard," or even a super ninja. This brings us to what I call "Gunfighter Logic"—10 simple RULES for using a handgun for personal protection.

## **RULE No. 1—All guns are always loaded.**

Well, no, not really. Some guns are unloaded. The thing is, if we *treat* all guns as if they are loaded, the less likely we are to do stupid things with them, like pointing them at ourselves, your wife, or your kids. Just like you often read in the paper or hear on the news, husband shoots wife and says, "I thought the gun was unloaded."



## **RULE No. 2: Never let the muzzle cover anything you are not willing to destroy.**

If there was only one rule of gun safety, this would be it. In fact, it is the first rule I teach and the one rule I demand compliance with. If gun owners followed just this one safety rule for the rest of eternity, accidental deaths and injuries from firearms would be committed only by the blind. And guns that were dropped on toes.



**Never point a gun at something you do not want holes in. This includes when you are being tactical, and your own body parts.**

## **RULE No. 3: Keep your finger off the trigger until your sights are on the target.**

Why would you do this? To make sure you don't inadvertently pull the trigger when you are not ready. The firearms instructor who



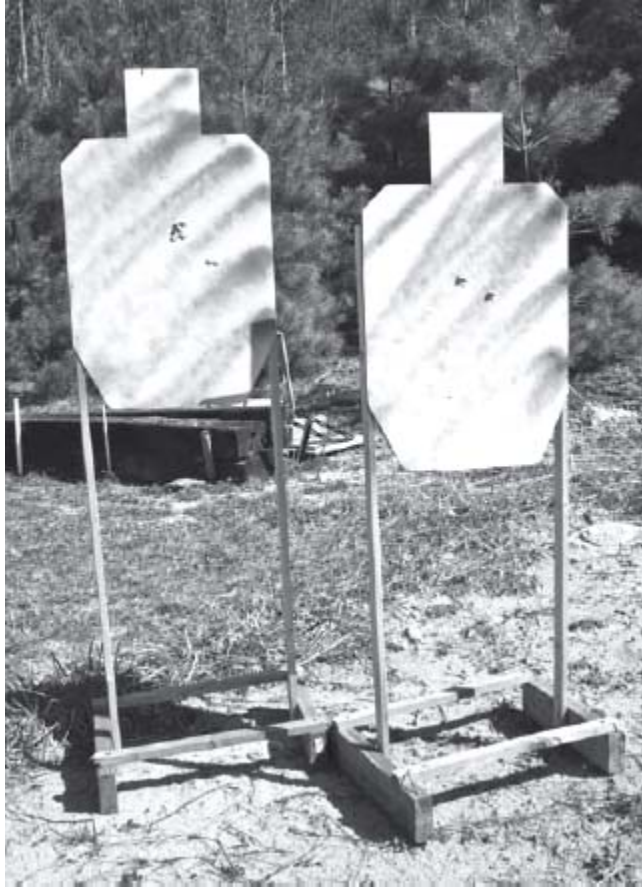
accidentally shot himself in the leg at my old department violated RULE No. 2 for sure when he pointed the pistol at his leg. However, had he not also violated RULE No. 3, he would probably have continued to offer less than acceptable training to the police officers he took to the range. By the way, he did not cover any of these rules with me on *our* first trip to the range.



**Are your sights on the target? Do you intend to shoot that target? If the answer to both questions is “Yes,” then and only then is it okay to put your finger on the trigger.**

## **RULE No. 4: Always be sure of your target.**

What does this mean? It means you only shoot at things that are okay to shoot at. Can you shoot at paper targets? Sure. But, be careful about what's beyond them. I once had a dog that liked to sneak down range. I broke him of this unsafe habit by accident. Once he got behind the target and received a hole in his ear. So go ahead, shoot the bad guy. Just make sure a family member isn't standing behind them.



**Bullets make holes in paper targets and then they make holes in what's behind them.**

## **RULE No. 5: You gotta be willing.**

Carrying a handgun for protection is an option available to you unless you live in a location where the politicians believe citizens are sheep. Most of us carry several personal items like a watch, cell phone, wallet, and maybe even a knife everywhere we go. If you are going to rely on a handgun for personal protection, you have to be willing to carry it and you must be willing to use it. If that's a commitment you cannot make, buy pepper spray, a Rottweiler and a thick leash, or hire a bodyguard.

When I was conducting firearms training for my department, I'd show a clip of John Wayne's last movie *The Shootist*. It was the part of the film where Wayne's character, J.B. Books, was giving "young Gillom" a shooting lesson. The most important advice Books gave the young boy was that "You gotta be willing." You need the right mindset. You have to be willing to fight and you have to be prepared to fight to the end—like you're killing snakes.



**Maybe a gun is not for you. Don't be ashamed. Recognize that fact and prepare accordingly by some other means.**



## **RULE No. 6: Have gun, will travel.**

To protect yourself with a handgun, you have to have it with you. If you're accosted in the parking lot of a Piggly Wiggly by some meth-fueled freak and your handgun is at home in that expensive gun safe you purchased, it is as worthless as a nun in a brothel. Pick a gun you can carry and will carry and then *carry it!*

## **RULE No. 7: Learn to run your gun and practice.**

I'm confused by and opposed to the requirements placed on those seeking a concealed carry permit. I'm not opposed to mandated training, as long as *you* are the one mandating the type and amount of training you must have.

That having been said, if you're going to carry a gun, you need to know how to run it. A gun is, after all, a very simple tool. But, in a life or death situation, you will experience the loss of fine motor skills and likely have tunnel vision, auditory exclusion, and various other physical anomalies happen to you. When it all goes to hell in a hand basket, you need to be prepared to manipulate your handgun without conscious thought.

Know how to load your gun, operate your gun, clear stoppages, shoot your gun, unload your gun, draw your gun, and holster your gun. Know it like you know your name and practice it every chance you get and can afford.



**It cannot protect you if you leave it at home.**

## **RULE No. 8: Be Justified. Don't be stupid. Think!**

The old saying "It's better to be judged by 12 than carried by six," or the more common "Anybody tries that on me and I'll shoot the SOB" might sound cool and macho but it's all bravado. Say it all you want, it won't keep you alive or scare anyone away.



**Continually develop and improve your weapon-craft. You cannot practice too much.**





Those who teach concealed carry classes often get the question, “How will I know if I will be justified if I shoot someone?” Here is the answer to that question so you can quit asking it and be a good citizen by going and telling all your friends so they don’t ask it: you won’t know.

Reality is arguably 90 percent perception. Your perception of a situation is *your* reality. Perceptions can be 90 percent wrong, but



our perceptions are what we must act upon. What matters is your ability to convey your perception of a situation to the police, a prosecutor, your lawyer, or a jury.

After a violent fight, I once arrested a man who claimed he thought I was a giant snake coming into his apartment to eat him. He was so spaced out from huffing gold paint I honestly believed that was his true perception of the situation. I'm not sure if the jury believed it or not, but either way it wasn't logical, which is why he went to jail.

If you believe the only way you can survive without grave injury is to shoot your attacker, then you are negligent in your efforts to survive if you do *not* pull the trigger. If you thought your attacker was a werewolf, zombie, or your mother-in-law, you might have trouble in court later. I'm just saying.

Don't be stupid. Don't put yourself in situations you cannot defend either physically or morally. Stay out of the bad side of town, don't park in dark areas, and avoid shady characters. If you end up in a gunfight, move fast, find cover, don't stand in doorways, linger in hallways, or hesitate. If you are at a bar and get in a fight, don't go home and get your gun or wait on the guy in the parking lot. If you catch a woman sleeping with your husband, don't shoot her unless she's trying to shoot you while in the throes of passion.

When you shoot, shoot to center mass of the available target. Shoot until the threat no longer exists. Shoot 'em to the ground, then call 9-1-1. Remember, being justified does not give you the right to take a life, only to use deadly force to stop a lethal attack. The law defines "attempts to kill" as murder.

## **RULE No. 9: Everything looks better with light on it.**

Okay, maybe not everything. Back when I was young and camo was my work uniform, I once woke up outside of Fort Knox, Kentucky, in the passenger seat of a convertible Ford Mustang. It was daylight. I looked over in the driver's seat and, to my horror, I was looking at the blondest woman I'd ever seen. Not only was she blonde, she looked like she had been a volunteer at a make-up factory. She also disproved the old adage that any girl looks good in a convertible. There's a reason they keep the insides of nightclubs dark.



**Have a plan. Use common sense. Think!**

Tragic mornings with strange women in convertibles aside, in the world of gunfighting, you cannot shoot what you cannot see. Neither can you justifiably identify a threat if you cannot see your attacker. Light also equals control. Bad guys are like vampires. (Don't tell the jury that.)

Even if you don't carry a handgun, carry a light and use it. Another light gadget that's a good idea is a laser. If a fiend attacks you in the dark, shine a Surefire in his face and paint his chest with a bright red dot—without ever pulling a trigger, you just might convince him he screwed with the wrong citizen.



**Bad guys and monsters do not like light. Use that knowledge to your advantage.**

## **RULE No. 10: Never be more than five shots away from cover, a reload, or a long gun.**

Bad guys may not give any visual indication they've been hit when you shoot them, and if you're scared bad enough to ruin your underwear, you might miss. Expect your worst shot in practice to be your best shot when a hoodlum is trying to stick a switchblade in your gut.

What I'm saying is that you might run out of ammo and need more. On top of that, handguns are not all that great at stopping a

fight. They are not in the same league as a shotgun or a rifle. When you're out and about, have a reload with you. When you are at home, have a long gun where you can get to it. Just in case. Oh, and obviously, it will be harder for the bad guy to shoot you if you are behind something.



**A complete personal safety plan involves a long gun, either a shotgun or rifle (and sometimes both, when you can manage them!).**

## Appendix B

# Mixing Ordnance Gelatin

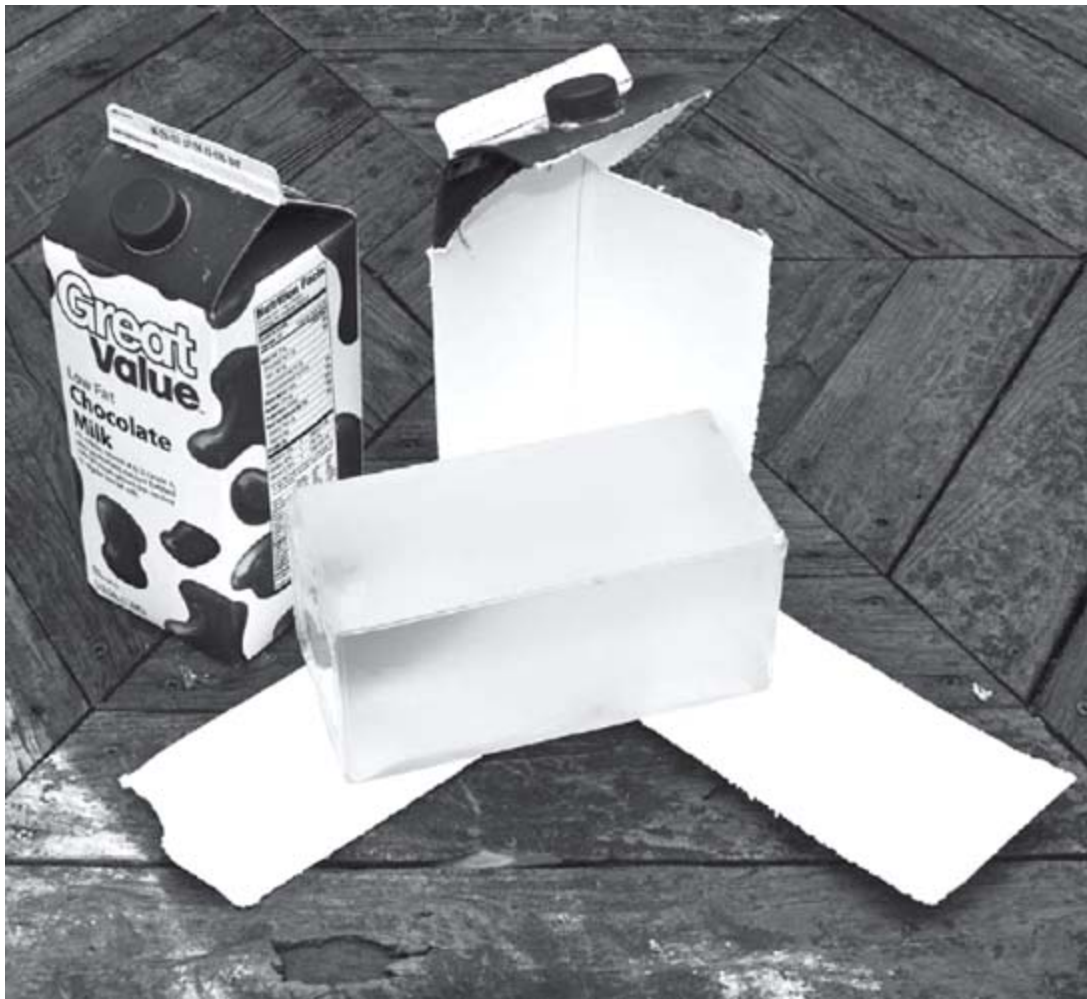
*A block of ordnance gelatin is not a bad guy—but bad guys don't show up at test labs asking to be shot.*

**I**n the late 1980s, the FBI established 10-percent ordnance gelatin as its soft tissue emulator. Since then, most bullet manufacturers have adopted 10-percent ordnance gelatin as a test medium. This does not mean ordnance gelatin at any mix ratio exactly simulates human or animal tissue. Nor does it mean it's the only media used by bullet manufacturers. It is, however, the most common terminal ballistics testing media.

Gelatin (type B) is obtained by the partial hydrolysis of collagen derived from the skin, white connective tissue, and bones of animals. Gelatin consists, approximately, of 86 percent protein, 12 percent moisture, and two percent ash “mineral salt.” Typical food-grade gelatin will not provide the right consistency. Ordnance gelatin provides a repeatable media for testing a bullet's penetration, expansion, and integrity, all of which influence its terminal performance.



**If there is an industry standard when it comes to a bullet testing media, it is ordnance gelatin. A 10-percent gelatin mixture is most often used.**



**Finding a suitable container for molding gelatin can be troublesome, especially for the homebound ballistician. Used, half-gallon cardboard milk cartons are a great solution to this dilemma.**

Most users mix gelatin in open molds that are then placed in a refrigerator. Gelatin doesn't have an appealing odor, and until it sets up it can spill. An easy way to make ordnance gelatin is to use half-gallon cardboard milk or orange juice containers with a screw-off top for a mold. To contain the bullets from most defensive handgun cartridges, you'll need three, 4.66-pound blocks formed in these half-gallon containers. You can place them end to end on a flat surface, which will give you 24 inches of gelatin to shoot into.

It's generally rather easy to shoot twice into one end of the three blocks and twice into the other end. This procedure allows you to test at least four bullets with three gelatin blocks; the center gelatin block becomes the catch block. Is this to the FBI standard, which specifics a larger block and that blocks be fired into only once? Nope. Does it matter? Only if you're the FBI. As long as bullet paths don't cross, your results should be sound. Actually, tests have shown that even when they do cross, results vary by such a minimal amount it's statistically irrelevant.

Ten-percent ordnance gelatin is called 10-percent ordnance gelatin because it's mixed at a 9:1 by-weight ratio with water. One of these half-gallon containers will make a block of 10-percent ordnance gelatin that weighs about 4.66 pounds. This means that, for each block, you will need .466-pound (7.45 ounces) of gelatin and 4.2 pounds (four pounds and 3.2 ounces) of water. Measure out the water and gelatin. You'll need a candy thermometer, funnel,

stirring spatula, mop bucket, and a one- to two-gallon pot with which you can heat the water on the stove.



**It's easy to see the difference in terminal performance, when testing in blocks of 10-percent ordnance gelatin. The real question is how the differences translate to the bullet's actual terminal performance in a bad guy. All we can do is guess.**

Heat the water to 140 degrees Fahrenheit and add 1.7 milliliters of foam eater and 0.5 milliliters of cinnamon oil. Foam eater cuts down the foam while mixing, and the oil of cinnamon aids in the prevention of bacteria (and lessens the nasty smell). With the help of a friend, pour the water into a bucket while pouring the gelatin in at the same time. Then, aggressively stir the mixture for about 10 minutes or until the gelatin is dissolved



Using a funnel, fill the half-gallon container through the screw-off cap opening. Screw on the cap and let the container cool for four hours at room temperature; you can write the time and date on the containers with a Sharpie. After cooling, place the container in the refrigerator for 24 hours. Temperature should be about 39 degrees Fahrenheit.

The temptation will be to adjust your percentages of the mix by the number of blocks you wish to make. The problem with this is that working with more than a half-gallon becomes tedious in a home kitchen, and the potential for a divorce-causing mess exists. Mix your gelatin block one container at a time.

The FBI requires gelatin blocks be calibrated. This is done by firing a .177-caliber steel BB at 590 fps, plus/minus 15 fps, into the gelatin. The BB should penetrate 2.95 to 3.74 inches. I used to do this, but after never having a block fail the test, I stopped. Do you have to calibrate your blocks by the FBI method? Only if you're the FBI. Can blocks that have not been calibrated yield inconsistent results? Yep, and again, tests have shown slight variations in block consistency impact the results only minimally. Follow the preparation instructions and your tests will provide meaningful information.

These cardboard containers make transporting gelatin to the range in a cooler easy. When you set them out to shoot, you just peel the cardboard off. Always shoot into gelatin on a safe range and don't assume the bullet will stop in the gelatin or that it will not come out the side. It is not safe to stand beside gelatin blocks when they are being shot. All common firearms safety practices should be observed.



**It might also be useful to test bullets through a common intermediate barrier like denim or some other fabric. After all, it's unlikely you'll ever have to shoot a naked bad guy.**

# Appendix C

## EVALUATION DRILLS SCORESHEET

NAME			DATE	
HANDGUN			AMMO	
<b>DRILL 1: MOZAMBIQUE / FAILURE DRILL</b>				
	<b>REQUIRED</b>	<b>OBTAINED</b>	<b>PAR TIME</b>	<b>4</b>
Z1 ZONE	2		MINUS ACTUAL TIME	
Z2 ZONE	1		DIFFERENCE	
PAR TIME	4 seconds		HITS	
			PLUS DIFFERENCE (ONLY IF THERE WERE NO MISSES)	
			DRILL TOTAL	
<b>DRILL 2: FORTY-FIVE DRILL</b>				
	<b>REQUIRED</b>	<b>OBTAINED</b>	<b>PAR TIME</b>	<b>5</b>
Z1 ZONE	5		MINUS ACTUAL TIME	
Z2 ZONE	0		DIFFERENCE	
PAR TIME	5 seconds		HITS	
			PLUS DIFFERENCE (ONLY IF THERE WERE NO MISSES)	
			DRILL TOTAL	
<b>DRILL 3: 357 DRILL</b>				
	<b>REQUIRED</b>	<b>OBTAINED</b>	<b>PAR TIME</b>	<b>15</b>
Z1 ZONE	8		MINUS ACTUAL TIME	
Z2 ZONE	2		DIFFERENCE	
PAR TIME	15 seconds		HITS	
			PLUS DIFFERENCE (ONLY IF THERE WERE NO MISSES)	
			DRILL TOTAL	
<b>DRILL 4: BACK OFF DRILL</b>				
	<b>REQUIRED</b>	<b>OBTAINED</b>	<b>PAR TIME</b>	<b>8</b>
Z1 ZONE	5		MINUS ACTUAL TIME	
Z2 ZONE	0		DIFFERENCE	
PAR TIME	8 seconds		HITS	
			PLUS DIFFERENCE (ONLY IF THERE WERE NO MISSES)	
			DRILL TOTAL	
<b>DRILL 5: REACH OUT AND TOUCH SOMEONE DRILL</b>				
	<b>REQUIRED</b>	<b>OBTAINED</b>	<b>PAR TIME</b>	<b>7</b>
Z1 ZONE	2		MINUS ACTUAL TIME	
Z2 ZONE	0		DIFFERENCE	
PAR TIME	7 seconds		HITS	
			PLUS DIFFERENCE (ONLY IF THERE WERE NO MISSES)	
			DRILL TOTAL	
<b>TOTAL SCORE FOR ALL DRILLS</b>				

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Most of all I'd like to thank my son, Bat. He puts up targets, loads ammo, mixes ordnance gelatin, shoots guns, runs the shot timer, and takes photos. All gun writers should have an assistant, and any would be well served with mine. Maybe most importantly, he's proof that the training methods in this book work. At just 12 years old, he can shoot a handgun better than I could when I became a cop.



**Bat and his artwork, painted with his Wilson Combat pistol.**

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